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Health and Social Service Manpower In Alberta, 1981

Alberta

HEALTH AND SOCIAL SERVICES
DISCIPLINES COMMITTEE

HEALTH AND SOCIAL SERVICE MANPOWER
IN ALBERTA, 1981

Alberta Health and Social Services
Disciplines Committee
c/o Planning Secretariat
Alberta Social Services and
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FOREWARD

Health and Social Service Manpower in Alberta, 1981 provides basic information and statistical data on thirty-five health and social service manpower groups in Alberta. This report is produced on behalf of the Alberta Health and Social Services Disciplines Committee by the Planning Secretariat, Department of Social Services and Community Health.

The Committee is a provincial government inter-departmental body consisting of a non-government Chairman and representatives from the Departments of Advanced Education & Manpower, Hospitals & Medical Care, and Social Services & Community Health. It has two main roles:

1. to advise the Ministers and Deputy Ministers of the three Departments on important health and social service manpower issues; and

2. to co-ordinate the three Departments' manpower research and planning activities in the health and social service areas.

In addition to publishing Health and Social Service Manpower in Alberta on an annual basis, the Committee also produces an Annual Report, which describes its major activities during each fiscal year, and summary reports based on its surveys of employers of health and social service personnel in the province.

The Committee wishes to thank the various provincial associations and licensing bodies which generously provided much of the information contained in Health and Social Service Manpower in Alberta, 1981.

Elvin A. Christenson, F.C.A.
Chairman
Alberta Health and Social
Services Disciplines Committee

Table of Contents

Page

Introduction 1
Map of Alberta Census Divisions 10
1. Audiologists and Speech Pathologists 11
2. Biomedical Engineers 19
3. Child Care Workers 27
4. Chiropractors 35
5. Combined Laboratory and X-Ray Technicians 41
6. Dental Assistants 47
7. Dental Hygienists 53
8. Dental Technicians 59
9. Dentists 65
10. Denturists 73
11. Dietary Technicians 79
12. Dietitians/Nutritionists 85
13. Emergency Medical Technicians - Paramedic 91
14. Health Record Administrators 97
15. Health Record Technicians 103
16. Medical Laboratory Technologists 109
17. Occupational Therapists 117
18. Ophthalmic Dispensers 125
19. Optometrists 131
20. Pharmacists 137
21. Pharmacy Assistants 143
22. Physicians 149
23. Physiotherapists 165
24. Podiatrists 171
25. Prosthetists and Orthotists 177
26. Psychiatric Nurses 183
27. Psychologists 191

Page

28. Public Health Inspectors 199
29. Radiological Technicians 205
30. Recreational Therapists 213
31. Registered Nurses 219
32. Registered Nursing Assistants 237
33. Rehabilitation Practitioners 245
34. Respiratory Technologists 253
35. Social Workers 259

INTRODUCTION

BACKGROUND

This is the fourth in a series of annual reports on health and social service manpower in Alberta. This report provides information and statistical data on thirty-five health and social service manpower groups. The information provided includes: functional definitions, information concerning professional associations and legislation, number of practitioners by region, changes in the number of personnel since 1979, and enrollments in and graduations from relevant educational programs in Alberta.

MANPOWER GROUPS INCLUDED IN REPORT

The following thirty-five health and social service manpower groups are included in this report:

1. Audiologists/Speech Pathologists
2. Biomedical Engineers
3. Child Care Workers
4. Chiropractors
5. Combined Laboratory and X-Ray Technicians
6. Dental Assistants
7. Dental Hygienists
8. Dental Technicians
9. Dentists
10. Denturists
11. Dietary Technicians
12. Dietitians/Nutritionists
13. Emergency Medical Technicians - Paramedic
14. Health Records Administrators
15. Health Records Technicians
16. Medical Laboratory Technologists
17. Occupational Therapists
18. Ophthalmic Dispensers
19. Optometrists

20. Pharmacists
21. Pharmacy Assistants
22. Physicians
23. Physiotherapists
24. Podiatrists
25. Prosthetists and Orthotists
26. Psychiatric Nurses
27. Psychologists
28. Public Health Inspectors
29. Radiological Technicians
30. Recreational Therapists
31. Registered Nurses
32. Registered Nursing Assistants
33. Rehabilitation Practitioners
34. Respiratory Technologists
35. Social Workers

Two criteria were used to decide whether or not to include a manpower group in this publication: it should be legislatively recognized and/or have a formal training program in Alberta. However, because of time constraints and limitations of resources, it was not possible to collect data on all such health and social service manpower groups. Nonetheless, it is hoped that data collection efforts will be sufficiently increased over the next few years to include all the major health and social service manpower groups.

Information on the geographic distribution of personnel in this report is based on census divisions, with separate breakdowns for the Census Metropolitan Areas of Edmonton and Calgary. Previous reports used the regional boundary system of the Department of Social Services and Community Health to portray the geographic distribution of personnel. However, this system was changed in 1981. Census divisions were used rather than the new regional boundaries, as the new regions were too large to represent the geographical distribution of personnel adequately, and census divisions are used by many governmental agencies as geographical units. The numbers of personnel in the Census Metropolitan Areas of Edmonton and Calgary are presented separately from their respective census divisions to give a better idea of the urban and non-urban distribution of personnel within these census divisions.[1] A map of the census divisions in Alberta immediately follows this chapter.

DATA SOURCES

The principal sources of data appearing in the report are:

1. the 1980 revised edition of the Canadian Classification and Dictionary of Occupations;
2. existing provincial legislation regulating the various manpower groups;
3. provincial professional associations or licensing bodies for 33 health and social service manpower groups (two manpower groups have no professional association or licensing body);
4. the Alberta Health and Social Services Disciplines Committee's surveys of employers of health and social service personnel;
5. the Alberta Physician Data Bank; and
6. Alberta Health and Social Service Training Program Inventory, 1980-81.

The Canadian Classification and Dictionary of Occupations is the source of many of the functional definitions supplied in this report. In some cases the professional associations supplied alternative definitions. Information on legislation and some of the functional definitions were derived from existing Acts governing these occupational groups.

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[1] The Census Metropolitan Area of Edmonton includes the City of Edmonton and the communities of Ardrossan, Bon Accord, Deville, Fort Saskatchewan, Gibbons, Gurneyville, Lancaster Park, Legal, Morinville, Namao, North Cooking Lake, Riviere Que Barre, Sherwood Park and St. Albert. The Census Metropolitan Area of Calgary includes the City of Calgary and the community of Langdon.

Most of the personnel data appearing in the report were obtained from professional associations or licensing bodies, particularly in cases in which registration with a professional association or licensing body was mandatory. However, for those groups for which registration is voluntary, the number of personnel registered can represent from 15 percent to 90 percent of the actual number of practising personnel. For these groups, surveys of employers of health and social service personnel were used, if possible, as alternative sources of data. These surveys were carried out on behalf of the Alberta Health and Social Services Disciplines Committee by the Planning Secretariat, Department of Social Services and Community Health.

The College of Physicians and Surgeons of Alberta and the Department of Hospitals and Medical Care jointly maintain a data bank on all physicians currently practising in Alberta. This data bank is the source of most of the manpower information appearing in the "Physicians" Chapter of this report.

The Alberta Health and Social Service Training Program Inventory, 1980-81, published on behalf of the Alberta Health and Social Services Disciplines Committee by the Health and Social Service Programs Branch, Department of Advanced Education and Manpower, is the source of the report's information on basic education programs for the various manpower groups.

Finally, the 1981 manpower data appearing in this report are as of December 31, 1981, except where noted.

LIMITATIONS OF THE DATA

There are problems with and limitations to the data presented in this report which relate to both the information supplied by the professional associations and the surveys of employers of health and social service personnel:

1. Some registries include members who are not active in Alberta. In most instances these members were excluded, but this was not feasible in some cases.

2. Registration or licensure is not required for some groups in order to practise, and in such cases, association figures generally underestimate the number of practitioners. The surveys of employers of health and social service personnel were used as an alternative source of data in most cases, but in certain cases this was not possible. Generally speaking, registration data from professional associations or registration bodies, for groups requiring mandatory registration, provide manpower information about the potential numbers of personnel in the province. Manpower statistics from the surveys reflect the actual numbers of personnel practising at the time of the survey.

3. The number of new registrants less the attrition of personnel should equal the net increase (or decrease) of registered personnel. However, because of variations in record-keeping in some associations, the figures do not balance at times.

4. While every effort was made to ensure the comprehensiveness of the surveys of employers of health and social service personnel, some employers may have been missed.

1980 MANPOWER SITUATION

In 1979, the Planning Secretariat, Department of Social Services and Community Health, began to conduct semi-annual surveys of employers of health and social service personnel in Alberta on behalf of the Alberta Health and Social Services Disciplines Committee. Six manpower surveys have been conducted, two in each year from 1979 to 1981. There are three major objectives for these surveys:

1. to monitor on a regular basis the current supply of and demand for health and social service personnel in the province;

2. to provide employers and the provincial government with an "early warning" system for discovering manpower shortages and problems of geographic mal-distribution; and

3. to provide information to enable Alberta to gear its health and social service manpower training programs to produce the numbers and types of personnel which employers require.

The Alberta Health and Social Services Disciplines Committee conducted its fifth employer survey on March 31, 1981. The survey obtained data on 63 health and social service manpower groups from a total of 1,887 employers, with a response rate of 99 percent.

As of March 31, 1981 there were 37,130 established "full-time equivalent"[1] positions for health and social service personnel in the employing agencies surveyed. At the time there were 1,816 vacant "full-time equivalent" positions, representing an average vacancy rate of 4.9 percent. In addition, the employing agencies reported an average turnover rate of 12.3 percent during the six-month period prior to the survey.

The Committee's sixth employer survey was conducted on September 30, 1981. Data were collected on 61 manpower groups from 1,720 employing agencies, with a response rate of 99.5 percent.

As of September 30, 1981 there were 38,461 established "full-time equivalent"[1] positions for health and social service personnel in the employing agencies surveyed. At the time there were 2,254 vacant "full-time equivalent" positions, representing an average vacancy rate of 5.8 percent. The reported average turnover rate over the preceding six months was 16.0 percent.

As of September 30, 1981 the manpower groups experiencing the highest vacancy rates were:

1. rehabilitation practitioners (15.8%)
2. child/youth care attendants (14.0%)
3. occupational therapists (13.4%)
4. physiotherapists (12.1%)

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[1] This number does not necessarily reflect the number of persons actually employed. Two or more part-time personnel often fill one full-time position. In addition, the number of "full-time equivalent" positions also includes vacancies.

5. respiratory technologists (11.0%)
6. recreational therapists (10.7%)

The manpower groups with the highest rates of turnover between April 1, 1981 and September 30, 1981 were:

1. child/youth care attendants (24.0%)
2. health care/institutional aides (23.9%)
3. child/youth care workers (23.5%)
4. dietary aides (22.7%)
5. graduate nurses (21.6%)
6. medical dicta-typists (21.6%)
7. alcoholism counsellors (21.2%)

TRAINING PROGRAMS

In 1980-81 Alberta had a total of 103 formal post-secondary educational programs for health and social service personnel. These training programs were located at twenty post-secondary educational institutions and hospitals in the province.

The Department of Advanced Education and Manpower publishes an annual report entitled Alberta Health and Social Service Training Program Inventory. The 1980-81 edition of this publication contained the following information on health and social service manpower training programs in Alberta:

1. locations and length of provincial training programs;
2. number of applicants;
3. first-year enrollment quotas;
4. actual enrollments; and
5. number of graduates.

Readers who wish to obtain more information on training programs should consult this publication.

HEALTH AND SOCIAL SERVICE MANPOWER LEGISLATION

Twenty of the health and social service manpower groups examined in this report are currently regulated by legislation in Alberta. On December 16, 1981 The Health Occupations Act was proclaimed. This Act is intended to provide a means of regulation for a wide variety of health occupations which are not currently regulated by legislation.

The Act provides for the establishment of the Health Occupations Board consisting of nine persons. The functions of the Board are:

1. to evaluate health occupations requesting regulation under the Act;
2. to recommend to the Minister responsible for Health and Social Services Professions and Occupations which occupations should be regulated;
3. to specify the educational qualifications, scopes of practice and standards of conduct for designated occupations; and
4. to act as an appeal body for decisions of the health occupation committees established under the legislation.

The Act requires the Minister to present a bill amending the Act to the legislature in order for a health occupation to be designated.

In addition to the proclamation of The Health Occupations Act, The Dental Mechanics Act was amended in 1981 to allow dental mechanics to designate themselves as "denturists".

FORMAT OF THE REPORT

The format of this report closely follows the format of previous reports. Following this introduction, there are separate chapters on each of the thirty-five manpower groups. Each chapter is divided into four sections:

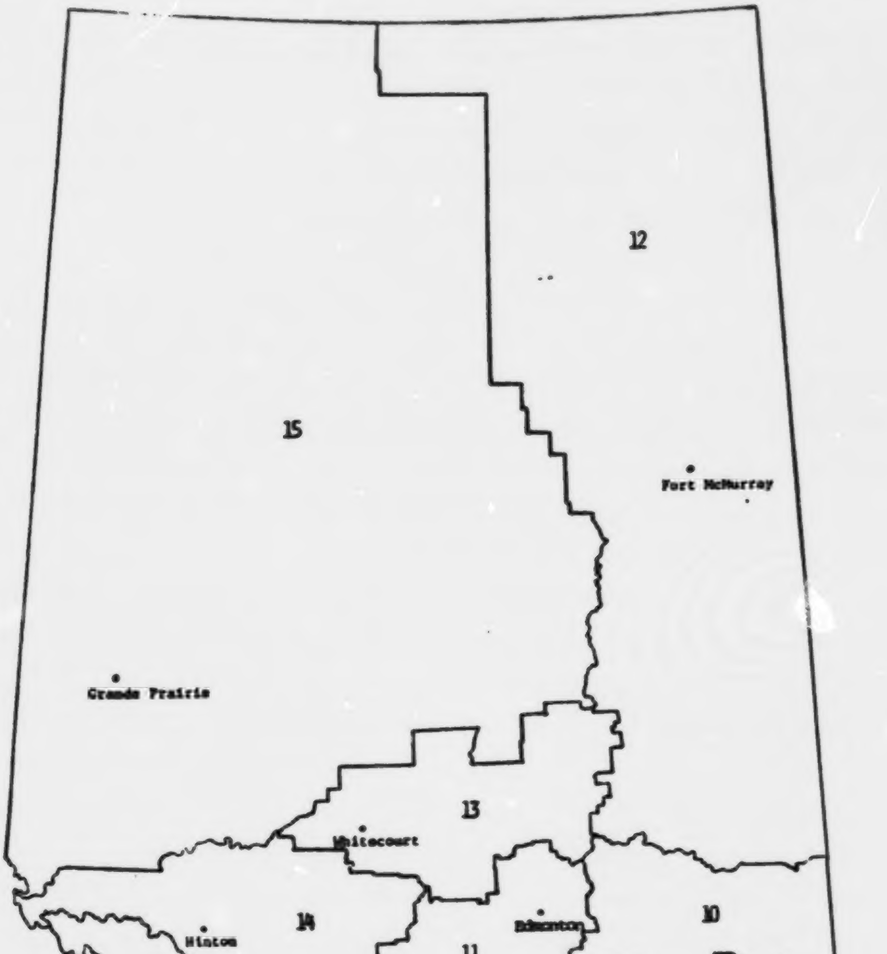
1. an overview section which includes a functional definition of the manpower group and statistical highlights on the group;

2. a section on the professional association and information on legislation;

3. a section on personnel data (e.g., the number and geographic distribution of personnel in the province); and

4. a section on educational programs including both basic and continuing education programs.

The chapters on Physicians and Registered Nurses contain additional information on the numbers of personnel practising by specialty area.



ALBERTA CENSUS DIVISIONS

1981

AUDIOLOGISTS AND SPEECH PATHOLOGISTS

I. OVERVIEW

Definition: **Audiologists**

Provide diagnostic evaluation and rehabilitative services and conduct research related to hearing. Administer air and bone conduction and other audiometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan, direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required.

(Source: No. 3137, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Speech Pathologists

Diagnose and treat speech, language and voice disorders and perform related research. Administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment. Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus.

(Source: No. 3137, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Speech and Hearing Association of Alberta is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 22 audiologists and 251 speech pathologists practising in Alberta[1]. About 73 percent of these personnel were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The audiologist-to-population ratio was 1:101,715 and speech pathologist-to-population ratio was 1:8,915.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Speech and Hearing Association of Alberta
c/o Department of Speech and Hearing
Alberta Children's Hospital
1820 Richmond Road S.W.
Calgary, Alberta
T2T 5C7

President: Mr. Glen A. Johnson

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating audiologists and speech pathologists.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PRACTISING AUDIOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	55,375	-
2 (Lethbridge)	1	110,477	1:110,477
3 (Pincher Creek)	0	35,652	-
4 (Hanna)	0	12,119	-
5 (Drumheller)	0	38,382	-
6 (Calgary)[3]	0	75,939	-
7 (Stettler)	0	40,071	-
8 (Red Deer)	0	123,642	-
9 (Banff)	0	21,670	-
10 (Camrose)	1	78,417	1: 78,417
11 (Edmonton)[4]	0	104,984	-
12 (Fort McMurray)	1	84,221	1: 84,221
13 (Whitecourt)	0	53,701	-
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	0	128,639	-
Census Metropolitan Area of Edmonton	12	657,057	1: 54,755
Census Metropolitan Area of Calgary	7	592,743	1: 84,678
PROVINCIAL TOTAL	22	2,237,724	1:101,715

TABLE 1B NUMBER OF PRACTISING SPEECH PATHOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	55,375	1: 9,229
2 (Lethbridge)	17	110,477	1: 6,499
3 (Pincher Creek)	2	35,652	1:17,826
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	1	38,382	1:38,382
6 (Calgary)[3]	2	75,939	1:37,970
7 (Stettler)	2	40,071	1:20,036
8 (Red Deer)	8	123,642	1:15,455
9 (Banff)	0	21,670	-
10 (Camrose)	3	78,417	1:26,139
11 (Edmonton)[4]	13	104,984	1: 8,076
12 (Fort McMurray)	5	84,221	1:16,844
13 (Whitecourt)	3	53,701	1:17,900
14 (Hinton)	4	24,635	1: 6,159
15 (Grande Prairie)	5	128,639	1:25,728
Census Metropolitan Area of Edmonton	104	657,057	1: 6,318
Census Metropolitan Area of Calgary	75	592,743	1: 7,903
PROVINCIAL TOTAL	251	2,237,724	1: 8,915

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	226[1]	211[2]	273[3]
% Change in Number of Practising Personnel[4]	-	-6.6%	22.7%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratio:			
- Alberta	1: 9,241	1:10,216	1: 8,197
- Western Canada[6]	1:12,054	1:11,392	1:11,319
- Canada[7]	1:17,983	-	-

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] The discrepancy between the 1980 and 1981 personnel figures is due mainly to the more comprehensive coverage of employers of audiologists and speech pathologists in the 1981 Survey.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The figures from British Columbia, Saskatchewan and Manitoba refer to personnel registered in the respective associations, whereas the data from Alberta refer to the number of practising personnel.

[7] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Educational Programs

The University of Alberta offers a baccalaureate degree program in speech pathology and audiology. The program is four years in length including one pre-professional year. There were 22 graduates from the program in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAM FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
University of Alberta (length: 4 years)			
Actual Enrollments: 1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	27	26	26
3rd Year	26	25	24
4th Year	26	26	25
Graduates:	22	25	22

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs

There are no continuing education programs offered by educational institutions in Alberta. However, the Speech and Hearing Association of Alberta offers one- and two-day seminars, and one-day in-service presentations in Edmonton and Calgary as well as a three-day annual convention. Monthly mini-seminars were given in 1981 in Northern Alberta.

BIOMEDICAL ENGINEERS

I. OVERVIEW

Definition: "Biomedical Engineering - usually either graduate engineers, mostly in electrical engineering with graduate training and experience in the biomedical sciences; or graduate engineers working in the field of Biomedical Engineering. Can play the following roles: provide engineering supervision of the technical staff, manage educational programs for others in the staff, efficient use of equipment, provide engineering consultation, improvement or innovative design of equipment, conduct research."

(Source: B. Leung; Development in Biomedical Engineering in Canada - Manpower and Governmental Activities; Health Manpower Directorate, Department of National Health and Welfare; Ottawa; 1973; pp. 2-3)

In 1981, there were 26 biomedical engineers in Alberta registered with the Canadian Medical and Biological Engineering Society.[1] About 81 percent of the province's biomedical engineers were located in the Census Metropolitan Areas of Edmonton and Calgary, which together accounted for slightly over half of the population of the province. The biomedical engineer-to-population ratio for Alberta was 1:86,066 in 1981.

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[1] Source: Canadian Medical and Biological Engineering Society.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Canadian Medical and Biological Engineering Society
c/o National Research Council
Room 183, Building M-50
OTTAWA, Ontario
K1A 0R8

National Executive Secretary: Mr. Nelson D. Durie

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating biomedical engineers.

III. PERSONNEL DATA

TABLE 1 NUMBER OF BIOMEDICAL ENGINEERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	55,375	-
2 (Lethbridge)	0	110,477	-
3 (Pincher Creek)	0	35,652	-
4 (Hanna)	0	12,119	-
5 (Drumheller)	0	38,382	-
6 (Calgary)[3]	1	75,939	1: 75,939
7 (Stettler)	0	40,071	-
8 (Red Deer)	0	123,642	-
9 (Banff)	0	21,670	-
10 (Camrose)	0	78,417	-
11 (Edmonton)[4]	2	104,984	1: 52,492
12 (Fort McMurray)	1	84,221	1: 84,221
13 (Whitecourt)	0	53,701	-
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	1	128,639	1:128,639
Census Metropolitan Area of Edmonton	14	657,057	1: 46,933
Census Metropolitan Area of Calgary	7	592,743	1: 84,678
PROVINCIAL TOTAL	26	2,237,724	1: 86,066

[1] Source: Canadian Medical and Biological Engineering Society.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR BIOMEDICAL ENGINEERS IN ALBERTA, 1979, 1980, and 1981

	1979	1980	1981
Number of Registered Personnel[1]	20	17	26
% Change in Number of Registered Personnel	-	-15.0%	52.9%
Population (Alberta)[2]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios: - Alberta	1:104,421	1:126,795	1:86,066

[1] Source: Canadian Medical and Biological Engineering Society.

[2] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Department of Applied Sciences in Medicine, the University of Alberta, offers a program for medical physicists, biomedical engineers and medical computing specialists in biomedical engineering. Students who are working in the Ph.D. program are enrolled in Engineering or Science departments and carry out their research in departments of the Faculty of Medicine. In 1980-81, there were 2 graduates from the Masters of Science program and 1 graduate from the Ph.D. program.

TABLE 3 BASIC EDUCATION PROGRAMS FOR BIOMEDICAL ENGINEERS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
A. Ph.D. PROGRAMS			
University of Alberta			
Ph.D. Program (offered by the Faculties of Engineering and Science)			
Actual Enrollments:	2	2	2
Graduates:	1	1	1
B. MASTERS PROGRAMS			
University of Alberta			
Masters of Science (offered by the Faculties of Engineering and Science)			
Actual Enrollments:	6	6	4
Graduates:	2	3	2
University of Alberta			
Masters of Science (offered by the Department of Applied Sciences in Medicine)			
Actual Enrollments:	2	2	2
Graduates:	-	-	-
PROVINCIAL TOTAL			
M.Sc. Training Programs (2)			
Actual Enrollments:	8	8	6
Graduates	2	3	2

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[1] Source: Department of Applied Sciences in Medicine, University of Alberta.

b) Continuing Education Programs:

The Canadian Medical and Biological Engineering Society has developed certification programs for Clinical Engineers and Biomedical Engineering Technicians and Technologists. The Association holds annual conferences.

CHILD CARE WORKERS

I. OVERVIEW

Definition: Care for and counsel emotionally disturbed or mentally handicapped children and youths in residential treatment facility, in special school or social intervention program. Supervise daily activities and attend to needs of children and youth under care. Arrange and direct recreational activities. Counsel children and youths to help them deal with personal or behavioural problems. Enforce residential rules and take measures to control unruly behaviour. Assess and report problems and progress of children and youths. Confer with other staff members and refer difficult cases to health care professionals or social workers. Help to mediate between child and parents, if required. Provide individual guidance for youths in social intervention programs within community or assist in supervision of special school classes for emotionally disturbed children, if required. Prepare meals, clean and perform related housekeeping duties, if required.

(Source: No. 2333, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Child Care Workers' Association of Alberta is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981 there were 1,149 child care workers practising in Alberta.[1] About 78 percent of the child care workers worked in the Census Metropolitan Areas of Edmonton and Calgary. The child care worker-to-population ratio in 1981 was 1:1,948. As the clientele of the province's child care workers in Alberta's population is the younger age groups, the provincial child care worker-to-population (0-17 years) ratio was 1:580 in 1981.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Child Care Workers' Association of Alberta
P.O. Box 11360
Edmonton, Alberta
T5J 3K6

President: Ms. Lyn Dimotoff

b) Licensing, Registration or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating child care workers.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING CHILD CARE WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	31	55,375	1: 1,786
2 (Lethbridge)	47	110,477	1: 2,351
3 (Pincher Creek)	2	35,652	1:17,826
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	1	38,382	1:38,382
6 (Calgary)[3]	1	75,939	1:75,939
7 (Stettler)	1	40,071	1:40,071
8 (Red Deer)	28	123,642	1: 4,416
9 (Banff)	2	21,670	1:10,835
10 (Camrose)	15	78,417	1: 5,228
11 (Edmonton)[4]	22	104,984	1: 4,722
12 (Fort McMurray)	42	84,221	1: 2,005
13 (Whitecourt)	4	53,701	1:13,425
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	56	128,639	1: 2,297
Census Metropolitan Area of Edmonton	561	657,057	1: 1,171
Census Metropolitan Area of Calgary	335	592,743	1: 1,769
PROVINCIAL TOTAL	1,149	2,237,724	1: 1,948

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHILD CARE WORKERS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	591[1]	969[2]	1,149[3]
% Change in Number of Practising Personnel[4]	-	64.0%	18.6%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 3,533	1: 2,224	1: 1,948

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] The large changes in the numbers of practising personnel are due mainly to the increasingly comprehensive coverage of employers of child care workers in the surveys.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1978-79 a two-year diploma program in youth development was offered by Grant McEwan Community College and a one-year certificate in youth services was offered by Mount Royal College. In 1979-80 the one-year certificate program at Mount Royal College was replaced by a two-year diploma program. In 1980-81 there were 16 graduates from the Youth Development Diploma program at Grant McEwan College and 1 graduate from the Mount Royal College program.

TABLE 3 BASIC EDUCATION PROGRAMS FOR CHILD CARE WORKERS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
A. DIPLOMA CHILD CARE PROGRAMS			
Grant McEwan Community College (length: 2 years)			
Actual Enrollments:[2]			
1st Year	45	53	37
2nd Year	20	27	29
Graduates:	14	17	16
Mount Royal College (length: 2 years)			
Actual Enrollments:			
1st Year	-	18	36
2nd Year	-	-	9
Graduates:[3]	-	-	1
PROVINCIAL TOTAL			
Diploma Programs (2)			
Actual Enrollments:			
1st Year	45	71	73
2nd Year	20	27	38
Graduates:	14	17	17
B. CERTIFICATE CHILD CARE PROGRAM			
Mount Royal College			
Actual Enrollments:			
1st Year	26		
Graduates:	6	program no longer offered	

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[1] Source: Alberta Health and Social Services Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, March 1982.

[2] There were 2 part-time students in 1978-79, 6 part-time students in 1980, and 8 part-time students in 1980-81.

[3] As this program started in 1979-80, there were no 2nd year enrollments and no graduates in 1979-80.

b) Continuing Education Programs:

The Child Care Workers' Association of Alberta ran a number of conferences and workshops during 1981. These included a 4-day Professional Development Conference, one 2-day workshop, eight 1-day workshops, and one 5-day workshop.

CHIROPRACTORS

I. OVERVIEW

Definition: A chiropractor practises the philosophy, science, and art of analyzing and the adjustment or manipulation of the human spinal column and other structures incidental thereto, and includes the use of x-ray and analytical instruments in relation thereto; "adjustment or manipulation" means a calculated procedure, force or thrust designed to move one structure in relation to another, particularly of the spinal column, to remove subluxations or fixations and to mobilize the affected structures for the purpose of restoring or maintaining health.

(Source: The Chiropractic Profession Act, Ch. 14, S.2[a][e])

In 1981 there were 276 chiropractors registered with the Alberta Chiropractic Association (A.C.A.).[1] Slightly over half (52.9%) of these personnel resided in the Census Metropolitan Areas of Edmonton and Calgary. The number of chiropractors registered with the A.C.A. increased by 6.2 percent from 1979 to 1981. The provincial chiropractor-to-population ratio in 1981 was 1:8,108.

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[1] Source: Alberta Chiropractic Association.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Chiropractic Association
203, 10106 - 111 Avenue
Edmonton, Alberta
T5G 0B4

Registrar: Dr. David E. Peterson

b) Licensing, Registration, or Certification Authority:

Alberta Chiropractic Association
203, 10106 - 111 Avenue
Edmonton, Alberta
T5G 0B4

and

Chiropractic Appraisal Board
c/o Health and Social Services
  Professions and Occupations
8th Floor, South Tower
Seventh Street Plaza
10030 - 107 Street
Edmonton, Alberta
T5J 3E4

c) Legislation:

Under the authority of The Chiropractic Profession Act, chiropractors, who want to practise for the first time in the province, must register with the A.C.A. In addition, mandatory annual re-registration with the Association is required of all chiropractors who want to continue practising in Alberta. The A.C.A. is also responsible for regulating the conduct of chiropractors and for disciplining them when needed.

The Chiropractic Appraisal Board (a provincial government certification body) sets the basic educational qualifications required for registration with the A.C.A. Any individual who is a graduate of a training program approved by the Board, and who passes an examination prescribed by the Board, or who is a member of the Canadian Chiropractic Association can be certified by the Board as being eligible for registration.

III. PERSONNEL DATA

TABLE 1 NUMBER OF CHIROPRACTORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	55,375	1: 6,153
2 (Lethbridge)	23	110,477	1: 4,803
3 (Pincher Creek)	6	35,652	1: 5,942
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	7	38,382	1: 5,483
6 (Calgary)[3]	12	75,939	1: 6,328
7 (Stettler)	5	40,071	1: 8,014
8 (Red Deer)	23	123,642	1: 5,376
9 (Banff)	2	21,670	1:10,835
10 (Camrose)	10	78,417	1: 7,842
11 (Edmonton)[4]	11	104,984	1: 9,544
12 (Fort McMurray)	5	84,221	1:16,844
13 (Whitecourt)	7	53,701	1: 7,672
14 (Hinton)	2	24,635	1:12,318
15 (Grande Prairie)	7	128,639	1:18,377
Census Metropolitan Area of Edmonton	78	657,057	1: 8,424
Census Metropolitan Area of Calgary	68	592,743	1: 8,717
PROVINCIAL TOTAL	276	2,237,724	1: 8,108

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. as of December 31, 1981. Excludes out-of-province, inactive, honorary, and retired members.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHIROPRACTORS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	258	265	276
% Change in Number of Registered Personnel	0.4%	2.7%	4.2%
Number of New Registrants[2]	12	19	24
Attrition of Personnel (Number)[3]	11	12	13
Attrition Rate[4]	4.3%	4.7%	4.9%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 8,095	1: 8,134	1: 8,108
- Western Canada[6]	1:10,552	1:10,150	1: 9,545
- Canada[7]	1:10,912	-	-

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the Alberta Chiropractic Association as of December 31, 1979, 1980, and 1981. Excludes out-of-province, inactive, honorary, and retired members.

[2] Source: Alberta Chiropractic Association.

[3] Source: Alberta Chiropractic Association. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba 1981, Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[7] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for chiropractors in Alberta. The Canadian Memorial Chiropractor College in Toronto, which offers a four-year training program, is the only institution where chiropractic training can be obtained in Canada. Many of Alberta's chiropractors received their training through American training programs.

b) Continuing Education Programs:

The A.C.A. sponsors at least two seminars annually for its members.

COMBINED LABORATORY AND X-RAY TECHNICIANS

I. OVERVIEW

Definition: The combined technician is a hospital worker trained to perform laboratory and x-ray work in smaller hospitals that do not have sufficient volume or range of work to warrant their employing both a laboratory technologist and an x-ray technician.

(Source: Saskatchewan Health Manpower Annual Report 1976, Policy Research and Management Services Branch, Department of Health, Province of Saskatchewan)

Since registration with the Alberta Society of Certified Combined Technicians is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981 there were 284 combined laboratory and x-ray technicians practising in Alberta.[1] Twenty-four percent of these personnel practised in the Census Metropolitan Areas of Edmonton and Calgary which together made up slightly over half of the province's population. The personnel-to-population ratio was 1: 7,879. In major urban centers, much of the work done by combined laboratory and x-ray technicians is performed by medical laboratory technologists and radiological technicians (see Chapters 16 and 29).

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Certified Combined
Technicians
P.O. Box 1815
Westlock, Alberta
T0G 2L0

President: Ms. Marj Ducharme

b) Licensing, Registration or Certification Authority:

Medical Radiological Technicians Board
(not currently operating)

c) Legislation:

Under the authority of The Radiological Technicians Act, all individuals practising as combined laboratory and x-ray technicians must be registered with the Medical Radiological Technicians Board (a provincial government licensing body). Annual re-registration with the Board is required of all combined laboratory and x-ray technicians in order to continue practising in Alberta.

The Board is responsible for regulating the conduct of all combined laboratory and x-ray technicians and for disciplining them when needed. Also, the Board sets basic educational qualifications required for registration.

However, the Medical Radiological Technicians Board has not operated for a number of years. As a result, the above-mentioned provisions of the Radiological Technicians Act are not currently in effect.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING COMBINED LABORATORY AND X-RAY TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	55,375	1: 27,688
2 (Lethbridge)	16	110,477	1: 6,905
3 (Pincher Creek)	6	35,652	1: 5,942
4 (Hanna)	6	12,119	1: 2,020
5 (Drumheller)	12	38,382	1: 3,199
6 (Calgary)[3]	26	75,939	1: 2,921
7 (Stettler)	20	40,071	1: 2,004
8 (Red Deer)	23	123,642	1: 5,376
9 (Banff)	6	21,670	1: 3,612
10 (Camrose)	22	78,417	1: 3,564
11 (Edmonton)[4]	18	104,984	1: 5,832
12 (Fort McMurray)	17	84,221	1: 4,954
13 (Whitecourt)	20	53,701	1: 2,685
14 (Hinton)	3	24,635	1: 8,212
15 (Grande Prairie)	19	128,639	1: 6,770
Census Metropolitan Area of Edmonton	56	657,057	1: 11,733
Census Metropolitan Area of Calgary	12	592,743	1: 49,395
PROVINCIAL TOTAL	284	2,237,724	1: 7,879

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2

SELECTED MANPOWER STATISTICS FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	261[1]	311[2]	284[3]
% Change in Number of Practising Personnel	-	19.2%	-8.7%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 8,002	1: 6,931	1: 7,879

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs

The Northern Alberta Institute of Technology offers a one-year program leading to a certificate in combined laboratory and x-ray technology. In 1981 this program produced a total of 22 graduates.

TABLE 3 BASIC EDUCATION PROGRAM FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA[1]

	Jan./79 to June/79[2]	Aug./79 to Feb./80[2]	Jan./80 to June/80[2]	Aug./80 to Feb./81[2]	Jan./81 to June/81[2]
Northern Alberta Institute of Technology (length: 1 year)					
Actual Enrollments:	17	20	16	16	17
Graduates:	12	12	11	10	12

[1] Since variations in starting and graduation dates create distortion when data are displayed on the basis of academic years, the enrollment and graduation figures for individual programs are given.

[2] Source: Alberta Health and Social Services Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs:

The Alberta Society of Certified Combined Technicians ran two workshops for its members in 1981 in addition to its annual convention. With the co-operation of the Southern Alberta Institute of Technology, the Society devised a course on radiation, health and safety. The Society also participated in the continuing education program on haematology sponsored by the Canadian Society of Laboratory Technologists.

DENTAL ASSISTANTS

I. OVERVIEW

Definition: Assist dentists in care and treatment of patients. Seat and prepare patient for dental treatment. Arrange instruments, materials and medications and hand them to the dentist. Keep oral operating area clear during dental procedure by using suction devices, water sprays, cotton rolls and holders, and by retraction of cheek and tongue. Prepare filling materials, using mechanical amalgamator and instruments and supply them to dentist as required. Comfort patient through reassuring conversation and actions. Give emergency treatment, as directed by dentist, for local and systemic distress. Advise patients on post-operative care, oral hygiene, and importance of diet and preventive dentistry. Sterilize instruments, using ovens, autoclaves and aseptic solutions. Pour, trim and mount plaster models from impressions taken by dentist and perform other dental laboratory procedures. Perform routine maintenance duties such as lubricating equipment, sharpening dental instruments, replacing expendable parts and cleaning equipment and treatment area. Expose, process and mount X-ray films. Polish teeth, apply fluoride to teeth and perform other intra-oral procedures, as permitted by training and by provincial legislation. Act as receptionist, if required.

(Source: No. 3157, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Dental Assistants Association is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of March 31, 1981, there were 1,546 dental assistants practising in Alberta.[1] About 69 percent of the province's dental assistants were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population.

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[1] Source: "March 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, September 1981.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Assistants Association
50 Chinook Dr. S.W.
Calgary, Alberta
T2V 2P6

Administrative Assistant/Registrar: Ms. Vicki Kranenburg, CDA

b) Licensing, Registration, or Certification Authority:

Alberta Dental Assistants Association
50 Chinook Drive S.W.
Calgary, Alberta
T2V 2P6

c) Legislation:

No legislation exists in Alberta requiring mandatory registration of all individuals practising as dental assistants in Alberta.

Under the authority of The Dental Association Act, the Alberta Dental Association, through its by-laws, can delegate the performance of duties of a dental nature to certain classes of persons. Under By-Law 17, the Alberta Dental Association requires that all dental assistants who are performing intra-oral duties in Alberta be registered with the Alberta Dental Assistants Association. There is no mandatory registration of individuals who are only performing general dental assisting duties in the offices of private practice dentists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING DENTAL ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	37	55,375	1: 1,497
2 (Lethbridge)	68	110,477	1: 1,625
3 (Pincher Creek)	16	35,652	1: 2,228
4 (Hanna)	2	12,119	1: 6,060
5 (Drumheller)	13	38,382	1: 2,952
6 (Calgary)[3]	23	75,939	1: 3,302
7 (Stettler)	13	40,071	1: 3,082
8 (Red Deer)	71	123,642	1: 1,741
9 (Banff)	19	21,670	1: 1,141
10 (Camrose)	42	78,417	1: 1,867
11 (Edmonton)[4]	51	104,984	1: 2,059
12 (Fort McMurray)	44	84,221	1: 1,914
13 (Whitecourt)	24	53,701	1: 2,238
14 (Hinton)	14	24,635	1: 1,760
15 (Grande Prairie)	44	128,639	1: 2,924
Census Metropolitan Area of Edmonton	569	657,057	1: 1,155
Census Metropolitan Area of Calgary	496	592,743	1: 1,195
PROVINCIAL TOTAL	1,546	2,237,724	1: 1,447

[1] Source: "March 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, September 1981.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL ASSISTANTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered or Practising Personnel[1]	764[1]	776[1]	1,546[2]
% Change in Number of Registered or Practising Personnel[3]	26.1%	1.6%	99.2%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 2,734	1: 2,778	1: 1,447
- Western Canada[5]	-	1: 2,070	1: 1,839

[1] Source: Alberta Dental Assistants Association. Number of active members registered with the Association and residing in Alberta as of December 31, 1979 and 1980. There was no mandatory registration requirement.

[2] Source: "March 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, September 1981.

[3] Since personnel figures for 1979, 1980, and 1981 were from different sources, they are not comparable. The figure for 1981 refers to the number of practising personnel as opposed to the 1979 and 1980 figures which refer to registered personnel.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[5] Sources: Health Manpower Provincial Report, Manitoba 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan; British Columbia data obtained from Peat, Marwick and Partners. The figures from British Columbia, Saskatchwan and Manitoba refer to personnel registered in the respective associations, whereas the 1981 figure for Alberta refers to the number of practising personnel.

IV. EDUCATION PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer 37-week dental assistant training programs. The total number of graduates from these two programs was 100 in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DENTAL ASSISTANTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Northern Alberta Institute of Technology (length: 9½ months)			
Actual Enrollments:[2]	76	77	75
Graduates:	68	65	67
Southern Alberta Institute of Technology (length: 37 weeks)			
Actual Enrollments:[2]	40	40	41
Graduates:	35	35	33
PROVINCIAL TOTAL			
Training Programs(2)			
Actual Enrollments:[2]	116	117	116
Graduates:	103	100	100

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The 1978-79 figures include both full-time and part-time students. There were 73 full-time and 3 part-time students in the N.A.I.T. program in 1978-79. The 1979-80 and 1980-81 figures include full-time students only.

b) Continuing Education Programs:

The Northern Alberta Institute of Technology offers a correspondence course to upgrade the training levels of dental assistants who have been trained on-the-job.

The Alberta Dental Assistants Association offers some continuing education programs for its members.

DENTAL HYGIENISTS

I. OVERVIEW

Definition: Provide preventive dental services and instruct patients in care of teeth and mouth. Scale and polish teeth to remove hard and soft deposits, using dental instruments and equipment. Polish fillings to remove tarnish and corrosion, using motorized apparatus. Apply topical agents and sealants to teeth to reduce decay. Conduct preliminary dental examination and record case history of patient. Record observed conditions and information for diagnosis and treatment planning by dentist. Instruct individuals and groups in home dental care and provide dietary counselling related to dental health. Expose, process and mount dental x-ray films. Take impressions of teeth for study models. Administer local anaesthetics, place, finish and polish fillings and remove sutures as permitted by training and by provincial legislation.

(Source: No. 3157, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Dental Hygienists Association is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of March 31, 1981, there were 409 practising dental hygienists in Alberta. About 73 percent of the practising dental hygienists resided in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The provincial dental hygienist-to-population ratio in 1981 was 1:5,471.

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[1] Source: "March 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, September 1981.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Hygienists Association
c/o Ms. Barbara Kara
4112 - 87 Avenue
Edmonton, Alberta
T6L 4G9

President: Ms. Barbara Kara

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

The Dental Association Act defines what a dental hygienist is and prescribes the necessary educational qualifications for a dental hygienist in Alberta. In order to practise in the province, dental hygienists must be graduates of the Dental Hygiene Program at the University of Alberta or, if they are graduates from other training programs, they must be certified by the Universities Co-ordinating Council.

Although The Dental Association Act prescribes the practice requirements for hygienists, the Act does not give the Alberta Dental Association any authority to either register or discipline dental hygienists. Nonetheless, the Alberta Dental Association maintains a register of dental hygienists for its own purposes.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING DENTAL HYGIENISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	55,375	1: 7,911
2 (Lethbridge)	12	110,477	1: 9,206
3 (Pincher Creek)	3	35,652	1:11,884
4 (Hanna)	2	12,119	1: 6,060
5 (Drumheller)	2	38,382	1:19,191
6 (Calgary)[3]	6	75,939	1:12,657
7 (Stettler)	7	40,071	1: 5,724
8 (Red Deer)	15	123,642	1: 8,243
9 (Banff)	2	21,670	1:10,835
10 (Camrose)	9	78,417	1: 8,713
11 (Edmonton)[4]	15	104,984	1: 6,999
12 (Fort McMurray)	14	84,221	1: 6,016
13 (Whitecourt)	4	53,701	1:13,425
14 (Hinton)	4	24,635	1: 6,159
15 (Grande Prairie)	10	128,639	1:12,864
Census Metropolitan Area of Edmonton	173	657,057	1: 3,798
Census Metropolitan Area of Calgary	124	592,743	1: 4,780
PROVINCIAL TOTAL	409	2,237,724	1: 5,471

[1] Source: "March 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, September 1981.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL HYGIENISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered or Practising Personnel	229[1]	247[1]	409[2]
% Change in Number of Registered or Practising Personnel[3]	9.1%	8.3%	65.6%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 9,120	1: 8,727	1: 5,471
- Western Canada[5]	-	1: 7,744	1: 6,222
- Canada[6]	1: 6,791	-	-

[1] Source: Alberta Dental Hygienists' Association. Number of dental hygienists registered with the Alberta Dental Hygienists' Association as of December 31, 1979 and 1980. Excludes out-of-province, inactive, retired, and honorary members.

[2] Source: "March 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Service Disciplines Committee, Edmonton, Alberta, September 1981.

[3] Since personnel figures for 1979, 1980 and 1981 were from different sources, they are not comparable. The figures for 1979 and 1980 refer to the number of registered personnel, whereas the 1981 figure refers to the number of practising personnel.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[5] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The figures from British Columbia, Saskatchewan and Manitoba refer to personnel registered in the respective associations, whereas the 1981 figure for Alberta refers to the number of practising personnel.

[6] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a two-year diploma program in dental hygiene. The program produced 35 and 33 graduates in 1979-80 and 1980-81, respectively.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL HYGIENISTS IN ALBERTA

	1977-78[1]	1978-79[1]	1980-81[1]
University of Alberta (length: 2 years)			
Actual Enrollments:			
1st Year	40	40	46
2nd Year	37	35	33
Graduates	32	35	33

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs:

Continuing education programs in dental hygiene are sponsored by the Faculty of Extension, the University of Alberta. In addition, the regional chapters of the Alberta Dental Hygienists' Association in Calgary and Edmonton provide some continuing education programs. Lectures and seminars are held in conjunction with the Association's annual convention. Dental hygienists are also invited to attend relevant seminars hosted by the District Dental Societies in Edmonton and Calgary.

DENTAL TECHNICIANS

I. OVERVIEW

Definition: Make and repair dentures and other dental devices. Fabricate full and partial dentures, using wax and plaster models, dental surveyors, articulators (fitting devices) and electric grinders and polishers. Shape metal, vulcanite or plastic plates for dentures. Mount porcelain or plastic teeth in plates using knowledge of size, shape, shade and colour. Finish dentures on grinding and buffing wheels. Construct metal clasps, inlays, bridgework and other aides according to specifications. Join breaks, make additions or reline denture bases to repair dentures.

(Source: No. 3157, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

As of December 31, 1981, 156 dental technicians were registered with the Alberta Dental Technicians Board and residing in Alberta.[1] The provincial dental technician-to-population ratio in 1981 was 1:14,344. Between 1979 and 1981, the number of dental technicians increased by 9.1 percent.

Eighty-five percent of the province's dental technicians were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. However, private dental laboratories in Edmonton and Calgary handle much of the dental technician work for the rural areas of northern and southern Alberta through the mail. Approximately half of the province's dental technicians were employed in private dental laboratories. The rest were employed in the offices of private practice dentists. Some of the services (e.g., the making of complete dentures) provided by dental technicians can also be provided by denturists.

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[1] Source: Alberta Dental Technicians Board.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Registered Dental Technicians
c/o Mr. Kim Starko
Inter Provincial Dental Lab
10578 - 109 Street
Edmonton, Alberta
T5H 3B2

Secretary-Treasurer: Mr. Kim Starko

b) Licensing, Registration, or Certification Authority:

Alberta Dental Technicians Board
c/o Health and Social Services
Professions and Occupations
8th Floor, South Tower
Seventh Street Plaza
10030 - 107 Street
Edmonton, Alberta
T5J 3E4

Board Chairman: Mr. John Hassenbank

c) Legislation:

Under the authority of The Dental Technicians Act, all individuals, who wish to practise as dental technicians, must register with the Alberta Dental Technicians Board (a provincial government licensing body). In addition, mandatory annual re-registration with the Board is required of all dental technicians who want to continue practising and using the title of dental technician.

The Board is responsible for regulating the conduct of dental technicians and for disciplining them when needed. Furthermore, the Board sets the educational qualifications required for registration as a dental technician in Alberta.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	55,375	1: 55,375
2 (Lethbridge)	6	110,477	1: 18,413
3 (Pincher Creek)	1	35,652	1: 35,652
4 (Hanna)	0	12,119	-
5 (Drumheller)	0	38,382	-
6 (Calgary)[3]	4	75,939	1: 18,985
7 (Stettler)	0	40,071	-
8 (Red Deer)	1	123,642	1:123,642
9 (Banff)	0	21,670	-
10 (Camrose)	3	78,417	1: 26,139
11 (Edmonton)[4]	5	104,984	1: 20,997
12 (Fort McMurray)	0	84,221	-
13 (Whitecourt)	1	53,701	1: 53,701
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	2	128,639	1: 64,320
Census Metropolitan Area of Edmonton	88	657,057	1: 7,467
Census Metropolitan Area of Calgary	44	592,743	1: 13,471
PROVINCIAL TOTAL	156	2,237,724	1: 14,344

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[1] Source: Alberta Dental Technicians Board. Number of dental technicians registered with the Alberta Dental Technicians Board and residing in Alberta as of December 31, 1981.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL TECHNICIANS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	143	160	156
% Change in Number of Registered Personnel	5.2%	11.9%	-2.5%
Number of New Registrants[2]	12	21	14
Attrition of Personnel (Number)[3]	5	24	18
Attrition Rate[4]	3.7%	16.8%	11.3%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:14,604	1:13,472	1:14,344
- Western Canada[6]	-	1:12,187	1:17,034

[1] Source: Alberta Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1979, 1980 and 1981.

[2] Source: Alberta Dental Technicians Board.

[3] Source: Alberta Dental Technicians Board. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March, 1982; Health Manpower Provincial Report, Manitoba 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

IV EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A two-year dental technicians training program is offered at the Northern Alberta Institute of Technology (N.A.I.T.). The first year of the program is a "core" year with the dental mechanics training program at N.A.I.T. There were 10 graduates from the dental technicians training program in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL TECHNICIANS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Northern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments[2]:			
1st Year	18	18	12
2nd Year	16	15	13
Graduates:	13	13	10

[1] Source: Alberta Health and Social Service Training Program Inventory, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The 1979-80 and 1980-81 figures include only full-time students. There were 33 full-time students and 1 part-time student in the N.A.I.T. program in 1978-79.

b) Continuing Education Programs:

An advanced ceronic course for crown and bridge ceronists was offered by the Alberta Society of Registered Dental Technicians.

DENTISTS

I. Overview

Definition: A dentist provides professional services including:

the diagnosis or treatment of, and the prescribing, treating or operating for the prevention, alleviation or correction of any disease, pain, deficiency, deformity, defect, lesion, disorder or physical condition of, in or from any human tooth, associated structure or tissue or any injury thereto,

the making, producing, reproducing, constructing, fitting, furnishing, supplying, altering or repairing or prescribing or advising the use of any prosthetic denture, bridge, appliance or thing for any of the purposes indicated in subclause (i), or to replace, improve or supplement any human tooth, or to prevent, alleviate, correct or improve any condition upon or in connection with any human tooth, associated structure or tissue, or in the treatment of any condition thereof, and

the taking or making, or the giving of advice or assistance or the providing of facilities for the taking or making of any impression, bite, cast or design preparatory to, or for the purpose of, or with a view to the making, producing, reproducing, constructing, fitting, furnishing, supplying, altering or repairing of any such prosthetic denture, bridge, appliance or thing;

(Source: The Dental Association Act, 1970, Ch. 90, S.2)

As of December 31, 1981, there were 1,014 dentists registered with the Alberta Dental Association (A.D.A.) and residing in Alberta.[1] Of these dentists, 900 (or 87 percent) were general practitioners, while the remaining 114 (or 13 percent) were specialists. Seventy percent of the dentists were graduates of the Faculty of Dentistry at the University of Alberta, 22 percent were graduates of dental programs in other Canadian provinces, and about 8 percent were graduates of foreign training programs.

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[1] Source: Alberta Dental Association.

Of the province's dentists, approximately 71 percent were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. From 1979 to 1981, the number of dentists in Alberta increased by 8.2 percent, while the provincial population increased by 7.1 percent during that same period. The provincial dentist-to-population ratio in 1981 was 1:2,207.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

Executive Director: Dr. B.P. Martinello

b) Licensing, Registration, or Certification Authority:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

c) Legislation:

Under the authority of The Dental Association Act, all dentists must register with the A.D.A. in order to practise. In addition, mandatory annual re-registration with the Association is required of all dentists who want to continue practising in Alberta.

The A.D.A. is responsible for regulating the conduct of dentists and for disciplining them when needed. Also, the Association can prescribe continuing education programs which its members must complete from time to time.

The Dental Association Act sets the basic educational qualifications required for registration with the A.D.A., and the A.D.A. sets the post-basic educational qualifications required for registration as a dental specialist. The Universities Coordinating Council is responsible for the certification of specialists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	17	55,375	1: 3,257
2 (Lethbridge)	48	110,477	1: 2,302
3 (Pincher Creek)	11	35,652	1: 3,241
4 (Hanna)	3	12,119	1: 4,040
5 (Drumheller)	8	38,382	1: 4,798
6 (Calgary)[3]	16	75,939	1: 4,746
7 (Stettler)	8	40,071	1: 5,009
8 (Red Deer)	47	123,642	1: 2,631
9 (Banff)	11	21,670	1: 1,970
10 (Camrose)	24	78,417	1: 3,267
11 (Edmonton)[4]	24	104,984	1: 4,374
12 (Fort McMurray)	26	84,221	1: 3,239
13 (Whitecourt)	16	53,701	1: 3,356
14 (Hinton)	10	24,635	1: 2,464
15 (Grande Prairie)	30	128,639	1: 4,288
Census Metropolitan Area of Edmonton	391	657,057	1: 1,680
Census Metropolitan Area of Calgary	324	592,743	1: 1,829
PROVINCIAL TOTAL	1,014	2,237,724	1: 2,207

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. as of December 31, 1981. Excludes out-of-province, inactive, retired members, and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2

SELECTED MANPOWER STATISTICS FOR DENTISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	937	964	1,014
% Change in Number of Registered Personnel	4.1%	2.9%	5.2%
Number of New Registrants[2]	88	78	63
Attrition of Personnel (Number)[3]	49	51	40
Attrition Rate[4]	5.5%	5.4%	4.2%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
Percent Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratio:			
- Alberta	1: 2,229	1: 2,236	1: 2,207
- Western Canada[6]	1: 2,103	1: 2,070	1: 1,999
- Canada[7]	1: 2,212	-	-

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. as of December 31, 1979, 1980, and 1981. Excludes out-of-province, inactive, retired members, and some dentists who worked for the Federal Government but were not registered with the A.D.A. Although the registration figures exclude inactive, out-of-province, honorary, and retired members, it was not possible to make this distinction in the data on membership gains and losses. As a result the net increase of membership does not equal the number of new registrants less the attrition of personnel.

[2] Source: Alberta Dental Association.

[3] Source: Alberta Dental Association. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall '81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba 1981, Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[7] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Educational Programs

The University of Alberta offers a four-year program in dentistry leading to a Doctor of Dental Surgery (D.D.S.) degree. A student must complete two years of "pre-dentistry" university preparation before acceptance into the program. Forty-six students graduated from the program at the University of Alberta in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
University of Alberta (length: 4 years)			
Actual Enrollments:			
1st Year	50	50	50
2nd Year	49	51	48
3rd Year	49	44	52
4th Year	47	46	44
Graduates:	47	44	46

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Health Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs

The Alberta Dental Association requires its members to participate in continuing education programs. Many courses in dentistry are offered throughout the year by the Continuing Education Department of the Faculty of Dentistry at the University of Alberta.

The local Dental Societies, of which there are seven in Alberta, usually present one-day courses on a once-a-month basis throughout the year except for June, July, and August. Local Dental Societies, other than those in Edmonton and Calgary, may have such courses only every two or three months. The courses presented cover a broad range of disciplines and topics.

There are other organizations which offer continuing education courses in Alberta on occasion. In addition, dentists may attend courses in other provinces and in the United States.

DENTURISTS

I. OVERVIEW

Definition: Design, construct, fit and repair dentures. Measure patient's jaws to determine size and shape of dentures using face bows, dental articulators and other devices. Make impression and mould of teeth, gums and jaws and design dentures. Direct other workers to construct dentures. Fit, adjust and repair dentures. Construct dentures, if required.

(Source: No. 3157, Canadian Classification and Dictionary of Occupations, 1981 - Revision)

In 1981, there were 151 denturists (formerly known as certified dental mechanics) in Alberta.[1] About 68 percent of these personnel resided in the Census Metropolitan Areas of Edmonton and Calgary, while slightly over half of the province's population was located in these two areas. The denturist-to-population ratio in 1981 was 1:14,819. Between 1979 and 1981, the number of denturists in the province increased by 18.9 percent, while Alberta's population increased by 10.4 percent during that same period.

Some of the services (e.g., making complete dentures) provided by denturists can also be provided by dental technicians. Similarly, some of the other functions (e.g., taking impressions for complete dentures) of denturists can also be handled by dentists.

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[1] Source: Alberta Board of Examiners for Certified Dental Mechanics.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

The Denturist Society of Alberta
201 Century Centre
2 Athabascan Avenue
Sherwood Park, Alberta
T8A 4E3

President: Mr. David K. Kerslake

b) Licensing, Registration, or Certification Authority:

Board of Examiners for Certified
Dental Mechanics
c/o Health and Social Services
Professions and Occupations
8th Floor, South Tower
Seventh Street Plaza
10030 - 107 Street
Edmonton, Alberta
T5J 3E4

Board Chairman: Mr. Elmar Able

c) Legislation:

Under the authority of The Dental Mechanics Act, all individuals, who want to practise as denturists in the province, must be certified by and registered with the Board of Examiners for Certified Dental Mechanics (a provincial government licensing body). Registration with The Denturist Society of Alberta is voluntary.

The Board is responsible for regulating the conduct of all denturists and for disciplining them when needed. Furthermore, the Board sets the educational qualifications required for certification as a denturist in Alberta. In addition, the Board is empowered to re-examine any denturist at any time and to suspend or cancel his certification if warranted.

In December 1981, the Dental Mechanics Amendment Act, 1981 was passed and assented to. This Act amended The Dental Mechanics Act by permitting dental mechanics to designate themselves as denturists.

III. PERSONNEL DATA

TABLE 1

NUMBER OF DENTURISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	55,375	1:27,688
2 (Lethbridge)	9	110,477	1:12,275
3 (Pincher Creek)	1	35,652	1:35,652
4 (Hanna)	0	12,119	-
5 (Drumheller)	3	38,382	1:12,794
6 (Calgary)[3]	1	75,939	1:75,939
7 (Stettler)	1	40,071	1:40,071
8 (Red Deer)	9	123,642	1:13,738
9 (Banff)	0	21,670	-
10 (Camrose)	9	78,417	1: 8,713
11 (Edmonton)[4]	3	104,984	1:34,995
12 (Fort McMurray)	4	84,221	1:21,055
13 (Whitecourt)	1	53,701	1:53,701
14 (Hinton)	1	24,635	1:24,635
15 (Grande Prairie)	4	128,639	1:32,160
Census Metropolitan Area of Edmonton	64	657,057	1:10,267
Census Metropolitan Area of Calgary	39	592,743	1:15,199
PROVINCIAL TOTAL	151	2,237,724	1:14,819

[1] Source: Alberta Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Alberta Board of Examiners for Certified Dental Mechanics as of December 31, 1981.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTURISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	127	139	151
% Change in Number of Registered Personnel	3.3%	9.4%	8.6%
Number of New Registrants[2]	16	13	14
Attrition of Personnel (Number)[3]	12	8	2
Attrition Rate[4]	9.8%	6.3%	1.4%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:16,444	1:15,507	1:14,819
- Western Canada[6]	-	1:16,573	1:16,004

[1] Source: Alberta Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Alberta Board of Examiners for Certified Dental Mechanics and residing in Alberta as of December 31, 1979, 1980, and 1981.

[2] Source: Alberta Board of Examiners for Certified Dental Mechanics.

[3] Source: Alberta Board of Examiners for Certified Dental Mechanics. Number of denturists registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In Alberta there are two routes a person may take in order to become a denturist. The first is to apprentice for five years under the supervision of a certified denturist. During this time students are required to complete examinations at four levels conducted by the Board of Examiners.

The Northern Alberta Institute of Technology offers a two-year training program for denturists. Upon completion of this program the graduate is required to apprentice for two years under the supervision of a certified denturist. During this time the graduates are required to complete examinations at four levels. The total number of graduates in 1980-81 was 10.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTURISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Northern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:[2]			
1st Year	18	18	16
2nd Year	19	16	14
Graduates:	12	13	10

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The 1978-79 figure includes both full-time and part-time students. There was 1 part-time student enrolled in the program in 1978-79. The 1979/80 and 1980/81 figures refer only to full-time students.

b) Continuing Education Programs:

There are no continuing education programs offered by educational institutions for denturists in Alberta at the present time. However, some continuing education programs and seminars are provided by The Denturist Society of Alberta.

DIETARY TECHNICIANS

I. OVERVIEW

Definition: Assist in the planning and supervision of food service programs in governmental, institutional and commercial establishment. Plan menus and diets, under direction of dietitian or nutritionist, to provide required food and nutrients to individuals and groups. Arrange work schedules and assist in supervision of those engaged in preparation and serving of meals. Purchase or requisition food, equipment and other supplies. Maintain food-cost-control and other operational records to assist in improving efficiency and quality of food service system. Inspect storage facilities and work areas to ensure observance of sanitation, safety and security standards. Maintain attendance and personnel records and assist with inventory of supplies and equipment.

(Source: No. 3159, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Society of Dietary Technicians is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 203 dietary technicians practising in Alberta.[1] Fifty-six percent of the province's dietary technicians were located in the Census Metropolitan Areas of Edmonton and Calgary, which together accounted for slightly over half of the population of Alberta. The dietary technician-to-population ratio in 1981 was 1:10,916.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Dietary Technicians
P.O. Box 3791, Station "B"
Edmonton, Alberta
T5L 4J8

or

Box 2353
Calgary, Alberta
T2P 2M6

President: Mrs. Lucy Denham

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating dietary technicians.

III. PERSONNEL DATA

TABLE 1

NUMBER OF PRACTISING DIETARY TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	55,375	1:18,458
2 (Lethbridge)	9	110,477	1:12,275
3 (Pincher Creek)	2	35,652	1:17,826
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	3	38,382	1:12,794
6 (Calgary)[3]	2	75,939	1:37,970
7 (Stettler)	3	40,071	1:13,357
8 (Red Deer)	21	123,642	1: 5,888
9 (Banff)	2	21,670	1:10,835
10 (Camrose)	8	78,417	1: 9,802
11 (Edmonton)[4]	5	104,984	1:20,997
12 (Fort McMurray)	5	84,221	1:16,844
13 (Whitecourt)	5	53,701	1:10,740
14 (Hinton)	2	24,635	1:12,318
15 (Grande Prairie)	17	128,639	1: 7,567
Census Metropolitan Area of Edmonton	68	657,057	1: 9,663
Census Metropolitan Area of Calgary	47	592,743	1:12,612
PROVINCIAL TOTAL	203	2,237,724	1:10,916

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETARY TECHNICIANS IN ALBERTA 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	165[1]	229[2]	203[3]
% Change in Number of Practising Personnel	35.2%	38.8%	-11.3%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios: - Alberta	1:12,657	1: 9,413	1:10,916

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. BASIC EDUCATION PROGRAMS

The Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology both offer a two-year program for dietary technicians leading to a diploma in dietary service technology. In 1980-81 there were 39 graduates from the two programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DIETARY TECHNICIANS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
DIETARY TECHNICIAN PROGRAMS			
Northern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:			
1st Year	21	32	32
2nd Year	20	19	26
Graduates:	20	19	20
Southern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:			
1st Year	21	34	36
2nd Year	20	15	21
Graduates:	17	15	19
PROVINCIAL TOTAL			
Training Programs (2)			
Actual Enrollments:			
1st Year	42	66	68
2nd Year	40	34	47
Graduates:	37	34	39

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Services Programs Branch, Alberta Advanced Education and Manpower, March 1982.

b) Continuing Education Programs:

There are no continuing education programs offered by provincial post-secondary institutions in Alberta for dietary technicians. In 1981 the Alberta Society of Dietary Technicians ran a two-day workshop-seminar for its members.

DIETITIANS/NUTRITIONISTS

I. OVERVIEW

Definition: Dietitians

Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food. Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food services facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required.

(Source: No. 3152, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Nutritionists

Provide consulting services to community and organize, plan and conduct programs concerning nutrition to assist in promotion of health and prevention of disease. Assess nutritional needs and available resources of community. Develop and implement community programs concerning nutrition. Advise health and other agencies on nutritional and food services standards of their food programs. Counsel individuals and families in nutritional principles, diet, food selection and economical buying practices. Interpret and evaluate current research relating to nutrition and food service systems management to public and to staff. Conduct or participate in in-service education. Plan, conduct and evaluate nutrition education programs for public. Prepare technical publications and publications for the public concerning food and nutrition. Plan, conduct and evaluate dietary studies and participate in studies of diseases with nutrition component. Plan or participate in funding programs and recommend budget. Manage and control financial resources.

(Source: No. 3152, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

As of December 31, 1981, 319 dietitians/nutritionists were registered with the Alberta Registered Dietitians Association (A.R.D.A.) and residing in Alberta.[1] Registration with the A.R.D.A. is not mandatory in order to practise in the province. The A.R.D.A. estimates that about 80 percent of all practising dietitians/nutritionists are registered with the Association. However, not all registered dietitians/nutritionists practise in the health and social service sector. According to the September 30, 1981 employee survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 200 dietitians/nutritionists actually practising in the health and social service sector.[2]

About three-quarters of the registered dietitians/nutritionists were located in the Census Metropolitan Areas of Edmonton and Calgary, while the two areas together accounted for slightly over half of the provincial population. The registered dietitian/nutritionist-to-population ratio for Alberta was 1: 7,015 in 1981. Between 1979 and 1981, the number of registered dietitians/nutritionists in Alberta increased by about 34 percent.

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[1] Source: Alberta Registered Dietitians Association.

[2] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

President: Ms. Lynn Fester

b) Licensing, Registration, or Certification Authority:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

c) Legislation:

Currently Alberta has no legislation requiring mandatory registration of all dietitians/nutritionists practising in the province. However, under the authority of the Registered Dietitians Act, individuals, who want to practise as dietitians/ nutritionists in the province, may register with the Alberta Registered Dietitians Association. Only those dietitians/ nutritionists who are registered with the Association may use the title "Registered Dietitian." Annual re-registration with the Association is required for dietitians/nutritionists who want to use the title "Registered Dietition". Alberta Registered Dietitians Association is responsible for regulating the conduct of its members and for disciplining them when needed.

The Universities Coordinating Council sets the basic educational qualifications required for registration with the Alberta Registered Dietitians Association. In addition, the Registered Dietitians Act stipulates additional educational and experiential qualifications for membership in the Association.

III. PERSONNEL DATA

TABLE 1 NUMBER OF REGISTERED DIETITIANS/ NUTRITIONISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	55,375	1:13,844
2 (Lethbridge)	9	110,477	1:12,275
3 (Pincher Creek)	3	35,652	1:11,884
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	1	38,382	1:38,382
6 (Calgary)[3]	3	75,939	1:25,313
7 (Stettler)	3	40,071	1:13,357
8 (Red Deer)	15	123,642	1: 8,243
9 (Banff)	0	21,670	-
10 (Camrose)	7	78,417	1:11,202
11 (Edmonton)[4]	11	104,984	1: 9,544
12 (Fort McMurray)	4	84,221	1:21,055
13 (Whitecourt)	3	53,701	1:17,900
14 (Hinton)	1	24,635	1:24,635
15 (Grande Prairie)	8	128,639	1:16,080
Census Metropolitan Area of Edmonton	126	657,057	1: 5,215
Census Metropolitan Area of Calgary	120	592,743	1: 4,940
PROVINCIAL TOTAL	319	2,237,724	1: 7,015

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the Alberta Registered Dietitians Association and residing in Alberta as of December 31, 1981. Excludes inactive, out-of-province, honorary, and retired members.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETITIANS/NUTRITIONISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	239	297	319
% Change in Number of Registered Personnel	4.4%	24.3%	7.4%
Number of New Registrants[2]	42	63	51
Attrition of Personnel (Number)[3]	-	19	21
Attrition Rate[4]	-	7.9%	7.1%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 8,738	1: 7,258	1: 7,015
- Western Canada[6]	1: 7,344	1: 8,308	1: 6,727
- Canada[7]	1: 7,525	-	-

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. as of December 31, 1979, 1980, and 1981. Excludes inactive, out-of-province, honorary, and retired members. Although the registration figures exclude inactive, out-of-province, honorary, and retired members, it was not possible to make this distinction in the data on membership gains and losses. As a result the net increase of membership does not equal the number of new registrants less the attrition of personnel.

[2] Source: Alberta Registered Dietitians Association.

[3] Source: Alberta Registered Dietitians Association. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by the number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver British Columbia, 1980; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[7] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Faculty of Home Economics at the University of Alberta offers a four-year baccalaureate degree program in food and nutrition. This program produced 27 and 19 graduates in 1979-80 and 1980-81, respectively.

TABLE 3 BASIC EDUCATION PROGRAM FOR DIETITIANS/NUTRITIONISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
University of Alberta (length: 4 years)			
Actual Enrollments:[2]			
1st Year	34	39	33
2nd Year	22	34	30
3rd Year	21	19	26
4th Year	33	27	21
Graduates	20	27	19

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] There were no part-time students in 1978-79 and 4 part-time students in 1979-80. There were no part-time students enrolled in the program in 1980-81.

b) Continuing Education Programs:

The Southern Alberta Institute of Technology offers a correspondence refresher course for graduate dietitians/nutritionists. In addition, continuing education programs are offered by the Alberta Registered Dietitians Association for its members. These programs include monthly seminars and workshops which cover various topics.

EMERGENCY MEDICAL TECHNICIANS - PARAMEDIC

I. OVERVIEW

Definition: An emergency attendant:

Gives emergency care to sick and injured persons at the scene of the accident or illness and during transport to the hospital. Assists with lifting of patient onto wheeled cart or stretcher and into and out of ambulance. Gives first aid such as mouth-to-mouth resuscitation, cardiac massage, administration of oxygen and application of bandages and splints. Assists with rescue work, if required. Performs duties of AMBULANCE DRIVER if required.

(Source: No. 2139-30, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

An Emergency Medical Technician - Paramedic is an emergency attendant capable of providing advanced life support services.

Advanced life support for the patient in cardiac arrest:

....consists of the following elements: basic life support, use of adjunctive equipment for ventilation and circulation, cardiac monitoring for dysrythmia recognition and control, defibrillation, establishment and maintenance of an intravenous infusion line, employment of definitive therapy, including drug administration... stabilization of the patient's condition and transportation with continuous monitoring.

(Source: American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." Journal of the American Medical Association, 1974, p. 852)

As of December 31, 1981, there were 149 emergency medical technicians-paramedic (commonly known as emergency paramedics) registered with the Registered Emergency Paramedic Association of Alberta.[1] About 58 percent of the registered members resided in the Census Metropolitan Area of Calgary, which accounted for about 26 percent of the province's population.

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[1] Source: Registered Emergency Paramedic Association of Alberta.

In Alberta, municipalities have the power to set the level of ambulance services beyond a legislated minimum standard. Some municipalities have established advanced life support level ambulance services and others have not. The municipalities which have established advanced life support level ambulance services include: Airdrie, Calgary, Fort McMurray, Grande Prairie, High Level, Medicine Hat, and St. Albert. This factor partly accounts for the very uneven distribution of emergency paramedic personnel in Alberta.

There was a 23-percent increase in the number of registered personnel between 1979 and 1981. Although registration with the Registered Emergency Paramedic Association of Alberta is voluntary, the Association estimates that over 90 percent of qualified emergency paramedics are members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Registered Emergency Paramedic Association of Alberta
P.O. Box 6859
Postal Station D
Calgary, Alberta
T2P 2E9

President: Mr. R.J. McManus

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation in Alberta which regulates emergency medical technicians - paramedic exclusively. However, there are four pieces of legislation which deal with ambulance services and ambulance attendants.

The Motor Transport Act requires that every "Class A Ambulance" in the province must be staffed by at least one qualified attendant who holds at least a St. John's Ambulance Certificate.

The Municipal Government Act allows municipalities to provide ambulance services which exceed the minimum standards set forth in the Motor Transport Act. Some municipalities have passed ambulance service regulations under this Act.

The Provincial Board of Health, under the Public Health Act, has the power to make regulations regarding the training and experience of ambulance drivers and attendants. So far, the Board of Health has made no such regulations.

Finally, The Medical Profession Act empowers the College of Physicians and Surgeons of Alberta to regulate "medical assistants" in the province and this provision of the Act was originally intended to apply to ambulance attendants. However, to date, the College has not made any regulations affecting "medical assistants".

III. PERSONNEL DATA

TABLE 1 NUMBER OF EMERGENCY MEDICAL TECHNICIANS - PARAMEDIC AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	55,375	1: 7,911
2 (Lethbridge)	0	110,477	-
3 (Pincher Creek)	1	35,652	1: 35,652
4 (Hanna)	0	12,119	-
5 (Drumheller)	1	38,382	1: 38,382
6 (Calgary)[3]	19	75,939	1: 3,997
7 (Stettler)	0	40,071	-
8 (Red Deer)	4	123,642	1: 30,911
9 (Banff)	1	21,670	1: 21,670
10 (Camrose)	0	78,417	-
11 (Edmonton)[4]	11	104,984	1: 9,544
12 (Fort McMurray)	8	84,221	1: 10,528
13 (Whitecourt)	0	53,701	-
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	5	128,639	1: 25,728
Census Metropolitan Area of Edmonton	6	657,057	1:109,510
Census Metropolitan Area of Calgary	86	592,743	1: 6,892
PROVINCIAL TOTAL	149	2,237,724	1: 15,018

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[1] Source: Registered Emergency Paramedic Assocation of Alberta. Number of paramedics registered with the Association and residing in Alberta as of December 31, 1981. Excludes out-of-province, inactive, honorary, and retired members.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR EMERGENCY MEDICAL TECHNICIANS - PARAMEDIC IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	121	136	149
% Change in Number of Registered Personnel	19.8%	12.4%	9.6%
Number of New Registrants	-	29	27
Attrition of Personnel (Number)[2]	-	14	16
Attrition Rate[3]	-	11.6%	11.8%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios: - Alberta	1:17,260	1:15,849	1:15,018

[1] Source: Registered Emergency Paramedic Association of Alberta. Number of emergency paramedics registered with the Registered Emergency Paramedic Association of Alberta as of December 31, 1979, 1980, and 1981. Excludes out-of-province, honorary, inactive, and retired members. Registration with the Association is not mandatory in order to practise as an emergency paramedic in the province.

[2] Source: Registered Emergency Paramedic Association of Alberta. Number of personnel registered in the previous year but did not renew their registration during that year.

[3] Attrition Rate: attrition of personnel (number) divided by the number registered (previous year).

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Southern Alberta Institute of Technology offers a two-year training program for emergency medical technicians - paramedic. In 1980-81 there were 26 graduates from this program.

TABLE 3 BASIC EDUCATION PROGRAM FOR EMERGENCY MEDICAL TECHNICIANS - PARAMEDIC IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Southern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:			
1st Year	30	30	33
2nd Year	25	26	29
Graduates:	25	23	26

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs:

Red Deer College offers seminars for graduate emergency medical technicians - paramedic. In addition, the Registered Emergency Paramedic Association of Alberta was involved in a seminar held in Vancouver, and encouraged members to attend it.

HEALTH RECORD ADMINISTRATORS

I. OVERVIEW

Definition: Compile and maintain medical records and statistics of hospital and clinic patients. Review clinical records for completeness and contact medical personnel to obtain missing data. Code, index and file records of diagnoses, diseases and treatments. Compile statistics, such as, reports on admissions, births, deaths, transfers and discharges. Release medical information to staff and authorized government agencies, insurance companies, physicians, hospitals and medical information and research centres. May brief and transcribe records. May testify in court to authenticate medical records.

(Source: No. 4161, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Health Record Association is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981 there were 132 health record administrators practising in Alberta.[1] About 50 percent of all health record administrators were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The health record administrator-to-population ratio in 1981 was 1:16,952.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Doreen L. Robbins

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating health record administrators.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING HEALTH RECORD ADMINISTRATORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	55,375	1: 27,688
2 (Lethbridge)	6	110,477	1: 18,413
3 (Pincher Creek)	5	35,652	1: 7,130
4 (Hanna)	1	12,119	1: 12,119
5 (Drumheller)	0	38,382	-
6 (Calgary)[3]	2	75,939	1: 37,970
7 (Stettler)	1	40,071	1: 40,071
8 (Red Deer)	6	123,642	1: 20,607
9 (Banff)	2	21,670	1: 10,835
10 (Camrose)	10	78,417	1: 7,842
11 (Edmonton)[4]	5	104,984	1: 20,997
12 (Fort McMurray)	5	84,221	1: 16,844
13 (Whitecourt)	9	53,701	1: 5,967
14 (Hinton)	1	24,635	1: 24,635
15 (Grande Prairie)	11	128,639	1: 11,694
Census Metropolitan Area of Edmonton	37	657,057	1: 17,758
Census Metropolitan Area of Calgary	29	592,743	1: 20,439
PROVINCIAL TOTAL	132	2,237,724	1: 16,952

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered or Practising Personnel	119[1]	127[2]	132[3]
% Change in Number of Registered or Practising Personnel[4]	-11.2%	6.7%	3.9%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratio: - Alberta	1:17,550	1:16,973	1:16,952

[1] Source: Alberta Health Record Association. Number of health record administrators registered with the Alberta Health Record Association and residing in Alberta as of December 31, 1979. Registration with the Association is not mandatory in order to practise in the province.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Since personnel figures for 1979, 1980, and 1981 are from different sources, they are not comparable. The figure for 1979 refers to registered personnel as opposed to the 1980 and 1981 figures which refer to practising personnel.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs

The Northern Alberta Institute of Technology offers a two-year program leading to a health records administrator diploma. There were 14 graduates from the program in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Northern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:			
1st Year	18	16	17
2nd Year	19	18	14
Graduates:	19	18	14

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs

The Alberta Health Record Association conducts several seminars. They also hold a provincial convention.

HEALTH RECORD TECHNICIANS

I. OVERVIEW

Definition: Assist Health Record Administrators, carry out many technical activities within the medical record department, typing medical information, preparing statistical reports, reviewing medical records, supervising clerical personnel, working with doctors, nurses and other health professionals on medical research projects.

(Source: Health Manpower Provincial Report, Manitoba, 1978)

Since registration with the Alberta Health Record Association is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 253 practising health record technicians in Alberta.[1] About forty-nine percent of the health record technicians were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The health record technician-to-population ratio in 1981 was 1:8,845.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Mrs. Doreen L. Robbins

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating health record technicians.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING HEALTH RECORD TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	55,375	1: 18,458
2 (Lethbridge)	8	110,477	1: 13,810
3 (Pincher Creek)	15	35,652	1: 2,377
4 (Hanna)	3	12,119	1: 4,040
5 (Drumheller)	5	38,382	1: 7,676
6 (Calgary)[3]	5	75,939	1: 15,188
7 (Stettler)	13	40,071	1: 3,082
8 (Red Deer)	16	123,642	1: 7,728
9 (Banff)	5	21,670	1: 4,334
10 (Camrose)	17	78,417	1: 4,613
11 (Edmonton)[4]	7	104,984	1: 14,998
12 (Fort McMurray)	7	84,221	1: 12,032
13 (Whitecourt)	11	53,701	1: 4,882
14 (Hinton)	2	24,635	1: 12,318
15 (Grande Prairie)	13	128,639	1: 9,895
Census Metropolitan Area of Edmonton	65	657,057	1: 10,109
Census Metropolitan Area of Calgary	58	592,743	1: 10,220
PROVINCIAL TOTAL	253	2,237,724	1: 8,845

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD TECHNICIANS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	280[1]	211[2]	253[3]
% Change in Number of Practising Personnel[4]	-	-24.6%	19.9%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratio: - Alberta	1: 7,241	1: 9,918	1: 8,845

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June, 1982.

[4] The changes in the number of practising personnel between 1979 and 1981 may be due to greater accuracy in the completion of questionnaire forms by employers.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs

The Southern Alberta Institute of Technology (S.A.I.T.) offers a twelve month health record certificate program. Ten months of the program are spent at S.A.I.T., while another two months are spent in a hospital practicum. Seventeen students graduated from the program in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD TECHNICIANS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Southern Alberta Institute of Technology (length: 12 months)			
Actual Enrollments[2]:	23	24	25
Graduates:	8	12	17

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The enrollment figures include both full-time and part-time students. There were 4 part-time students in both 1978-79 and 1980-81, and 2 part-time students in 1979-80.

b) Continuing Education Programs

The Alberta Health Record Association conducts an annual education meeting for its members.

MEDICAL LABORATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Perform medical laboratory tests, procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conduct chemical analysis of blood, urine, cerebro-spinal and other body fluids to ascertain normal and abnormal constituents. Study blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Prepare tissue sections for microscopic examination using fixation, imbedding, cutting and staining techniques to demonstrate special cellular tissue elements or other characteristics. Study micro-organisms which cause disease and their effect upon the human body, using a variety of microscopic and macroscopic techniques. Perform blood group, type and compatability tests for transfusion purposes. Investigate responses of body to foreign cells or agents.

(Source: No. 3156, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Canadian Society of Laboratory Technologists is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 1,895 practising medical laboratory technologists in Alberta.[1] Slightly more than four-fifths of these personnel were practising in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The provincial medical laboratory technologist-to-population ratio in 1981 was 1:1,181.

In addition to medical laboratory technologists, combined laboratory and x-ray technicians provide some basic laboratory services, especially in small rural hospitals (see Chapter 5).

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Canadian Society of Laboratory Technologists
Alberta Branch
Box 4165
Edmonton, Alberta
T6E 4T2

President: Mrs. Pat Roddick

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating medical laboratory technologists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING MEDICAL LABORATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	33	55,375	1: 1,678
2 (Lethbridge)	98	110,477	1: 1,127
3 (Pincher Creek)	12	35,652	1: 2,971
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	3	38,382	1:12,794
6 (Calgary)[3]	34	75,939	1: 2,234
7 (Stettler)	13	40,071	1: 3,082
8 (Red Deer)	86	123,642	1: 1,438
9 (Banff)	9	21,670	1: 2,408
10 (Camrose)	33	78,417	1: 2,376
11 (Edmonton)[4]	19	104,984	1: 5,525
12 (Fort McMurray)	25	84,221	1: 3,369
13 (Whitecourt)	8	53,701	1: 6,713
14 (Hinton)	12	24,635	1: 2,053
15 (Grande Prairie)	47	128,639	1: 2,737
Census Metropolitan Area of Edmonton	856	657,057	1: 768
Census Metropolitan Area of Calgary	606	592,743	1: 978
PROVINCIAL TOTAL	1,895	2,237,724	1: 1,181

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1981.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	1,597[1]	1,866[2]	1,895[3]
% Change in Number of Practising Personnel[4]	-	16.8%	1.6%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:1,308	1:1,155	1:1,181
- Western Canada[6]	-	-	1:1,229
- Canada[7]	1:1,603	-	-

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] The discrepancy between the 1979 and 1980 personnel figures is due mainly to the more comprehensive coverage of employers of medical laboratory technologists in the 1980 Survey.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981.

[7] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology in Edmonton and the Southern Alberta Institute of Technology in Calgary offer medical laboratory technology diploma programs. Both programs are two years in length. There were 76 graduates from the two programs in 1980-81.

The University of Alberta also offers a four-year B.Sc. program in medical laboratory science. There were 18 graduates from this program in 1979-80 and in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAMS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
A. DIPLOMA PROGRAMS			
Northern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:[2]			
1st Year	70	67	65
2nd Year	61	48	47
Graduates:	60	48	50
Southern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:[2]			
1st Year	50	49	53
2nd Year	33	32	44
Graduates:	30	32	26
PROVINCIAL TOTAL			
Diploma Program (2)			
Actual Enrollments:[2]			
1st Year	120	116	118
2nd Year	94	80	91
Graduates:	90	80	76
B. BACCALAUREATE PROGRAMS			
University of Alberta (length: 4 years)			
Actual Enrollments:			
1st Year	35	35	30
2nd Year	5	26	23
3rd Year	20	20	21
4th Year	17	18	18
Graduates:	17	18	18

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The figures include both full-time and part-time students. There were 206 full-time students and 3 part-time students enrolled in the two diploma programs in 1980-81.

b) Continuing Education Programs:

There are no continuing education programs for medical laboratory technologists offered by educational institutions in Alberta. However, the Continuing Education Committee of the Canadian Society of Laboratory Technologists, Alberta Branch organizes various seminars, workshops, and evening courses throughout the province. These programs vary in length from one day to many weeks and include relevant topics in all disciplines of medical technology. Since September 1979 over 40 of such programs have been run in Alberta including credit courses for advanced certification. In addition, rural areas are served by four in-service correspondence courses.

OCCUPATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons. Administer test and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self-confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially-adapted household equipment and furnishings. Assess patient's vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provide training for children with learning disabilities. Record patient's activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational therapy students and auxiliary personnel assigned to department.

(Source: No. 3137, Canadian Classification and Dictionary of Occupations, 1980 - Revision).

Since registration with the Alberta Association of Registered Occupational Therapists is not mandatory, the employer survey of the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 229 practising occupational therapists in Alberta.[1] About 82 percent of these personnel were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of Alberta's population. The provincial occupational therapist-to-population ratio in 1981 was 1:9,772.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Registered
Occupational Therapists
Faculty of Rehabilitation Medicine
University of Alberta
Edmonton, Alberta
T6G 2G4

President: Ms. Judy Lee

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating occupational therapists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING OCCUPATIONAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	55,375	1: 13,844
2 (Lethbridge)	6	110,477	1: 18,413
3 (Pincher Creek)	1	35,652	1: 35,652
4 (Hanna)	1	12,119	1: 12,119
5 (Drumheller)	1	38,382	1: 38,382
6 (Calgary)[3]	2	75,939	1: 37,970
7 (Stettler)	1	40,071	1: 40,071
8 (Red Deer)	7	123,642	1: 17,663
9 (Banff)	0	21,670	-
10 (Camrose)	2	78,417	1: 39,209
11 (Edmonton)[4]	4	104,984	1: 26,246
12 (Fort McMurray)	4	84,221	1: 21,055
13 (Whitecourt)	3	53,701	1: 17,900
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	5	128,639	1: 25,728
Census Metropolitan Area of Edmonton	111	657,057	1: 5,919
Census Metropolitan Area of Calgary	77	592,743	1: 7,698
PROVINCIAL TOTAL	229	2,237,724	1: 9,772

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL THERAPISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	237[1]	201[2]	229[3]
% Change in Number of Practising Personnel	-	-15.2%	13.9%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 8,555	1:10,412	1: 9,772
- Western Canada[5]	-	-	1: 9,492

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[5] Sources: *Rollcall 81*, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; *Health Manpower Provincial Report, Manitoba, 1981*, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatachewan. The figures from British Columbia, Saskatchewan and Manitoba refer to personnel registered in the respective associations, whereas the data from Alberta refer to the number of practising personnel.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A four-year baccalaureate degree program is offered at the University of Alberta. In 1980-81, there were 50 graduates from the program.

Under an interprovincial training agreement, four training places per year are reserved for Saskatchewan students in the occupational therapy program at the University of Alberta.

TABLE 3 BASIC EDUCATION PROGRAM FOR OCCUPATIONAL THERAPISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
University of Alberta (length: 4 years)			
Actual Enrollments:[2]			
1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	30	31	36
3rd Year	27	24	24
4th Year[3]	90	56	50
Graduates:			
Diploma Program	56	44	50

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] Enrollment figures include both full-time and part-time students. In 1979-80 there were 20 full-time and 36 part-time students enrolled in the fourth year of the program and in 1980-81 there were 26 full-time and 24 part-time students enrolled in the fourth year of the program. The second and third year enrollment figures consisted of full-time students only.

[3] Increase in the fourth year enrollment was due to graduates of three-year diploma programs returning to complete the fourth and final year of the baccalaureate degree program in order to earn their baccalaureate degrees.

b) Continuing Education Programs:

The Department of Occupational Therapy at the University of Alberta offers credit courses for diploma level occupational therapists who are trying to complete their baccalaureate degree.

The Alberta Association of Registered Occupational Therapists sponsors informal continuing education programs in the form of seminars, workshops, and short courses on a wide variety of topics related to occupational therapy.

OPHTHALMIC DISPENSERS

I. OVERVIEW

Definition:	An ophthalmic dispenser supplies, prepares, or dispenses ophthalmic appliances; interprets prescriptions from ophthalmologists or optometrists in respect of ophthalmic appliances; fits, adjusts and adapts ophthalmic appliances to the needs of the intended wearer in accordance with a prescription from an ophthamologist or optometrist, or without a prescription where lenses are duplicated with no change in their refractive value.

(Source: The Ophthalmic Dispensers Act, 1965, Ch. 66, S. 2; 1969, Ch. 84, S. 2)

In 1981 there were 252 ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta.[1] While slightly over half of the provincial population resided in the Census Metropolitan Areas of Edmonton and Calgary, 81 percent of the province's ophthalmic dispensers were located in these two areas. The total number of ophthalmic dispensers increased by 18.3 percent from 1979 to 1981. The provincial ophthalmic dispenser-to-population ratio in 1981 was 1:8,880.

In addition to ophthalmic dispensers, many of the province's optometrists also supply, prepare, and dispense ophthalmic appliances.

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[1] Source: Alberta Guild of Ophthalmic Dispensers.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Guild of Ophthalmic Dispensers
10830 Jasper Avenue
Edmonton, Alberta
T5J 2B3

President: Mr. William Carmichael

b) Licensing, Registration, or Certification Authority:

Ophthalmic Dispensers Examining Board
c/o Health and Social Services
Professions and Occupations
8th Floor, South Tower
Seventh Street Plaza
10030 - 107th Street
Edmonton, Alberta
T5J 3E4

and

Alberta Guild of Ophthalmic Dispensers
10830 Jasper Avenue
Edmonton, Alberta
T5T 2B3

c) Legislation:

Under the authority of the Ophthalmic Dispensers Act, all individuals, who want to practise as ophthalmic dispensers in the province, must first apply for and receive a certificate of competency from the Ophthalmic Dispensers Examining Board (a provincial government certification body). Applicants are required to pass examinations offered by the Board. The Board also issues special certificates of competency in dispensing contact lenses. The Board sets the basic educational qualifications required for a certificate of competency or a special certificate of competency in dispensing contact lenses and for registration with the Guild. Furthermore, the Board prescribes standards of competency and proficiency for members of the Guild.

Initial registration with the Guild is mandatory for ophthalmic dispensers who are practising for the first time in the province. In addition, mandatory annual re-registration with the Guild is required of ophthalmic dispensers who want to continue practising in Alberta. The Guild is responsible for disciplining its members, but the Ophthalmic Dispensers Examining Board is also empowered to review matters of competency.

III. PERSONNEL DATA

TABLE 1 NUMBER OF OPHTHALMIC DISPENSERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	55,375	1: 7,911
2 (Lethbridge)	12	110,477	1: 9,206
3 (Pincher Creek)	0	35,652	-
4 (Hanna)	0	12,119	-
5 (Drumheller)	1	38,382	1: 38,382
6 (Calgary)[3]	2	75,939	1: 37,970
7 (Stettler)	1	40,071	1: 40,071
8 (Red Deer)	9	123,642	1: 13,738
9 (Banff)	0	21,670	-
10 (Camrose)	3	78,417	1: 26,139
11 (Edmonton)[4]	3	104,984	1: 34,995
12 (Fort McMurray)	3	84,221	1: 28,074
13 (Whitecourt)	0	53,701	-
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	7	128,639	1: 18,377
Census Metropolitan Area of Edmonton	119	657,057	1: 5,521
Census Metropolitan Area of Calgary	85	592,743	1: 6,973
PROVINCIAL TOTAL	252	2,237,724	1: 8,880

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers as of December 31, 1981. Excludes out-of-province, honorary, inactive, and retired members.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPHTHALMIC DISPENSERS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number Registered[1]	213	210	252
% Change in Number Registered	6.0%	-1.9%	20.0%
Number of New Registrants[2]	18	15	50
Attrition of Personnel (Number)[3]	6	19	8
Attrition Rate[4]	3.0%	9.0%	3.8%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 9,805	1:10,313	1: 8,880

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Guild as of December 31, 1979, 1980, and 1981. Excludes out-of-province, honorary, inactive, and retired members.

[2] Source: Alberta Guild of Ophthalmic Dispensers.

[3] Source: Alberta Guild of Ophthalmic Dispensers. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for ophthalmic dispensers in Alberta. Most ophthalmic dispensers are trained on-the-job and through correspondence courses offered by the Canadian Guild of Ophthalmic Dispensers.

Beginning in 1980, an individual must have completed the Canadian Guild of Ophthalmic Dispensers correspondence course and have had three years of experience working in an optical laboratory or optical dispensary in order to take the examinations of the Alberta Ophthalmic Dispensers Training Board. Previously, individuals with five years of such experience were eligible to take these examinations without having had completed the correspondence course.

b) Continuing Education Programs:

There are no continuing education programs for ophthalmic dispensers offered by educational institutions in Alberta at the present time. However, some continuing education programs are offered by the Guild for its members.

OPTOMETRISTS

I. OVERVIEW

Definition: An optometrist is a primary health care practitioner who examines the eyes and related physiological structures to determine the presence of vision problems, diseases, or other abnormalities and then prescribes specific treatment of the visual system. Treatment includes prescribing and adapting glasses, contact lenses, optical aides for the partially-sighted, and the use of eye exercises (vision training, orthoptics) to preserve or restore maximum efficiency of vision. One of the most important parts of the optometric examination is the evaluation and early detection of ocular signs and symptoms of possible diseases elsewhere in the body. By thorough evaluation of the internal and external structure of the eye, the optometrist can detect certain systemic and eye diseases that require referral of the patient to other health care practitioners.

(Source: Alberta Optometric Association)

There were 187 optometrists registered with the Alberta Optometric Association (A.O.A.) and residing in the province in 1981.[1] Approximately 61 percent of the optometrists were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of Alberta's population. Some optometrists in Edmonton and Calgary operate satellite offices in neighboring rural areas. As well, some optometrists from Edmonton and Grande Prairie maintain satellite offices in Fort McMurray, High Level, and Fort Vermilion.

The number of optometrists increased by 8.1 percent from 1979 to 1981. The provincial optometrist-to-population ratio in 1981 was 1:11,966.

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[1] Source: Alberta Optometric Association.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Optometric Association
No. 2, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

Executive Director: Mr. Adrian Berry

b) Licensing, Registration, or Certification Authority:

Board of Examiners for Optometry
c/o Health and Social Services
Professions and Occupations
8th Floor, South Tower
Seventh Street Plaza
10030 - 107 Street
Edmonton, Alberta
T5J 3E4

and

Alberta Optometric Association
No. 2, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

c) Legislation:

Under the authority of the Optometry Act, all individuals, who want to practise as optometrists for the first time in Alberta, must apply to the Board of Examiners for Optometry (a Provincial Government certification body). The Board sets the educational qualifications and conducts both written and oral examinations to determine eligibility for registration with the Alberta Optometric Association. And if an individual is eligible, the Board issues a Certificate of Approval for Registration. Initial registration with the Association is mandatory and every optometrist practising in Alberta must maintain his or her membership in good standing in the Alberta Optometric Association.

The A.O.A. is also responsible for regulating the conduct of optometrists and for maintaining professional discipline under the terms of the Optometry Act.

III. PERSONNEL DATA

TABLE 1 NUMBER OF OPTOMETRISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	55,375	1:18,458
2 (Lethbridge)	12	110,477	1: 9,206
3 (Pincher Creek)	1	35,652	1:35,652
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	1	38,382	1:38,382
6 (Calgary)[3]	3	75,939	1:25,313
7 (Stettler)	3	40,071	1:13,357
8 (Red Deer)	19	123,642	1: 6,507
9 (Banff)	1	21,670	1:21,670
10 (Camrose)	6	78,417	1:13,070
11 (Edmonton)[4]	5	104,984	1:20,997
12 (Fort McMurray)	4	84,221	1:21,055
13 (Whitecourt)	5	53,701	1:10,740
14 (Hinton)	1	24,635	1:24,635
15 (Grande Prairie)	8	128,639	1:16,080
Census Metropolitan Area of Edmonton	59	657,057	1:11,137
Census Metropolitan Area of Calgary	55	592,743	1:10,777
PROVINCIAL TOTAL	187	2,237,724	1:11,966

[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.O.A. as of December 31, 1981. Excludes out-of-province, honorary, inactive, and retired members.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPTOMETRISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	173	179	187
% Change in Number of Registered Personnel	0.0%	3.5%	4.5%
Number of New Registrants[2]	2	14	14
Attrition of Personnel (Number)[3]	2	5	6
Attrition Rate[4]	1.2%	2.9%	3.4%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:12,072	1:12,042	1:11,966
- Western Canada[6]	1:13,516	-	1:12,936
- Canada[7]	1:11,300	-	-

[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.O.A. as of December 31, 1979, 1980, and 1981. Excludes out-of-province, honorary, inactive, and retired members.

[2] Source: Alberta Optometric Association.

[3] Source: Alberta Optometric Association. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March, 1982; Health Manpower Provincial Report, Manitoba 1981, Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[7] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for optometrists in Alberta. However, Alberta, Saskatchewan, and Manitoba have had an inter-provincial training agreement with the School of Optometry at the University of Waterloo and the Government of Ontario since 1976. Under this agreement, the three western provinces annually purchase 13 training places (Alberta : 7 places; Saskatchewan : 3 places; and Manitoba : 3 places) in the four-year University of Waterloo program. Prerequisite for admission into the School is two years of pre-optometry training (or equivalent courses in the sciences, including physics, mathematics, biology, zoology, chemistry, and psychology). In 1981, Alberta had seven students enrolled in each of the four years of training at the University of Waterloo under the current agreement. In September 1981 the agreement with the University of Waterloo and the Government of Ontario was renewed for a further five year period.

In addition to the University of Waterloo, another program in optometry is offered at the University of Montreal. This is a French-speaking program, and the western provinces have no inter-provincial training agreements with the University of Montreal.

b) Continuing Education Programs:

Alberta educational institutions do not offer any continuing education programs for optometrists. However, two or more educational seminars are sponsored each year by the A.O.A. Each of these seminars is of the nature and length to enable attendees to obtain the 12 hours of continuing education required of each member each year.

PHARMACISTS

I. OVERVIEW

Definition:	Compound and dispense prescribed pharmaceuticals and related preparations. Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products. (Source: No. 3151, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

As of December 31, 1981, there were 1,699 pharmacists registered with the Alberta Pharmaceutical Association (A.P.A.) and residing in the province.[1] About 60 percent of the province's pharmacists were located in the Census Metropolitan Areas of Edmonton and Calgary, which together made up slightly over half of the province's population. Between 1979 and 1981, the number of pharmacists increased by 8.0 percent, while Alberta's population increased by 7.1 percent during that same period. The provincial pharmacist-to-population ratio was 1:1,317 in 1981.

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[1] Source: Alberta Pharmaceutical Association.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

Registrar-Treasurer: Mr. D. Cameron

b) Licensing, Registration, or Certification Authority:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

c) Legislation:

Under the authority of The Pharmaceutical Association Act, all pharmacists, who want to practise for the first time in the province, must register with the A.P.A. In addition, mandatory annual re-registration with the Association is required of all pharmacists who want to continue practising in Alberta.

The Alberta Pharmaceutical Association is also responsible for regulating the conduct of pharmacists and for disciplining them when needed.

The Pharmaceutical Association Act sets the basic educational qualifications required for registration with the A.P.A.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PHARMACISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	38	55,375	1: 1,457
2 (Lethbridge)	86	110,477	1: 1,285
3 (Pincher Creek)	22	35,652	1: 1,621
4 (Hanna)	9	12,119	1: 1,347
5 (Drumheller)	33	38,382	1: 1,163
6 (Calgary)[3]	50	75,939	1: 1,519
7 (Stettler)	27	40,071	1: 1,484
8 (Red Deer)	98	123,642	1: 1,262
9 (Banff)	20	21,670	1: 1,084
10 (Camrose)	54	78,417	1: 1,452
11 (Edmonton)[4]	80	104,984	1: 1,312
12 (Fort McMurray)	48	84,221	1: 1,755
13 (Whitecourt)	34	53,701	1: 1,579
14 (Hinton)	14	24,635	1: 1,760
15 (Grande Prairie)	67	128,639	1: 1,920
Census Metropolitan Area of Edmonton	600	657,057	1: 1,095
Census Metropolitan Area of Calgary	419	592,743	1: 1,415
PROVINCIAL TOTAL	1,699	2,237,724	1: 1,317

[1] Source: Alberta Pharmaceutical Association. Number of active members registered with the Alberta Pharmaceutical Association as of December 31, 1981. Excludes out-of-province, inactive, honorary, and retired members.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number Registered[1]	1,573	1,611	1,699
% Change in Number Registered	5.9%	2.4%	5.5%
Number of New Registrants[2]	127	115	155
Attrition of Personnel (Number)[3]	32	83	67
Attrition Rate[4]	2.2%	3.2%	4.2%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 1,328	1: 1,338	1: 1,317
- Western Canada[6]	1: 1,340	1: 1,329	1: 1,309
- Canada[7]	1: 1,483	-	-

[1] Source: Alberta Pharmaceutical Association. Number of active members registered with the Alberta Pharmaceutical Association as of December 31, 1979, 1980, and 1981. Excludes out-of-province, inactive, honorary, and retired members.

[2] Source: Alberta Pharmaceutical Association.

[3] Source: Alberta Pharmaceutical Association. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[7] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATION PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year program in pharmacy leading to a Bachelor of Science Degree in pharmacy. Ninety-nine students graduated from the program in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAM FOR PHARMACISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
University of Alberta (length: 4 years)			
Actual Enrollments:[2]			
1st Year	100	90	69
2nd Year[3]	30	108	123
3rd Year	86	101	97
4th Year	90	75	101
Graduates:	90	73	99

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] Enrollment figures for academic year 1978-79 should be interpreted with caution due to problems in retrieving the data.

[3] Transfer students who have credit for first-year courses can enter the program at the second-year level. These students are counted in the quota for the program.

b) Continuing Education Programs:

The Division of Continuing Pharmacy Education of the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta annually publishes a booklet, Prospectives, which outlines continuing education programs that are currently available to the province's pharmacists. These programs are sponsored by the Faculty of Pharmacy and Pharmaceutical Sciences and by the Alberta Pharmaceutical Association. These programs include interprofessional forums, workshops, seminars, Sunday sessions (which are offered throughout the province), and correspondence courses. Regular lectures and courses offered in the Faculty of Pharmacy and Pharmaceutical Sciences are also open to pharmacists who wish to continue their education.

PHARMACY ASSISTANTS

I. OVERVIEW

Definition: Assist pharmacist in hospital, industrial or retail pharmacy. Compound and mix ointments, solutions, lotions or other medications, according to specific instructions, under supervision of pharmacist. Pre-package drugs. Label drugs, chemical or other pharmaceutical preparations. Assist with keeping records of narcotics issued and returned. Count drugs issued, keeps inventory and prepare orders for suppliers, as approved by the pharmacist. Unpack and store supplies and verify items received against invoices. Wash and sterilize bottles, beakers and other glassware and utensils. Clean pharmacy work area. Answer inquiries at wicket and deliver drug items, if required. Compute charges for narcotics and pharmaceuticals dispensed from pharmacy, if required.

(Source: No. 3159, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since there is no professional association for pharmacy assistants, manpower information for this occupational group is based on the employer survey conducted by the Alberta Health and Social Services Disciplines Committee.

As of September 30, 1981 there were 276 practising pharmacy assistants in Alberta.[1] Sixty-eight percent of these personnel were located in the Census Metropolitan Areas of Edmonton and Calgary which together made up slightly over half of the province's population. The pharmacy assistant-to-population ratio in 1981 was 1:8,108.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

None.

b) Licensing, Registration or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating pharmacy assistants.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING PHARMACY ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	55,375	1:13,844
2 (Lethbridge)	23	110,477	1: 4,803
3 (Pincher Creek)	0	35,652	-
4 (Hanna)	0	12,119	-
5 (Drumheller)	4	38,382	1: 9,596
6 (Calgary)[3]	0	75,939	-
7 (Stettler)	7	40,071	1: 5,724
8 (Red Deer)	18	123,642	1: 6,869
9 (Banff)	1	21,670	1:21,670
10 (Camrose)	14	78,417	1: 5,601
11 (Edmonton)[4]	2	104,984	1:52,492
12 (Fort McMurray)	5	84,221	1:16,844
13 (Whitecourt)	0	53,701	-
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	10	128,639	1:12,864
Census Metropolitan Area of Edmonton	98	657,057	1: 6,705
Census Metropolitan Area of Calgary	90	592,743	1: 6,586
PROVINCIAL TOTAL	276	2,237,724	1: 8,108

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACY ASSISTANTS IN ALBERTA, 1979, 1980 AND 1981

	1979	1980	1981
Number of Practising Personnel	65[1]	174[2]	276[3]
% Change in Number of Practising Personnel[4]	-	167.7%	58.6%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios: - Alberta	1:32,130	1:12,388	1: 8,108

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "March 31, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, August 1980.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] The large increases in the numbers of personnel shown are due mainly to the increasingly comprehensive coverage of the employers of pharmacy assistants in the surveys of employers.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs

The majority of pharmacy assistants in Alberta have been trained on the job. However, in 1976 a one-year program leading to a pharmacy technician certificate was established at Red Deer College. In 1980-81 there were 20 graduates from this program.

TABLE 2 BASIC EDUCATION PROGRAM FOR PHARMACY ASSISTANTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Red Deer Community College (length: 1 year)			
Actual Enrollments:	15	20	23
Graduates:	15	18	20

[1] Source: Alberta Health and Social Services Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs:

There are no continuing education programs for pharmacy assistants in Alberta.

PHYSICIANS

I. OVERVIEW

Definition: The work of physicians is concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnoses, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine as well as rehabilitative techniques; performing surgical operations in the treatment of injuries, diseases and disorders of the human body and engaging in clinical research within the field of activities and scope of competence.

(Source: No. 3111, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

As of December 31, 1981, there were 3,080 physicians registered in Alberta.[1] Of these active physicians, 58 percent were general practitioners. The remaining 42 percent were specialists.

Seventy-two percent of the province's physicians were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. Approximately 12 percent of the physicians were located in communities with population of between 10,000 and 60,000. About 2 percent of the physicians were located in communities with population of between 5,000 and 10,000; and another 14 percent of the physicians were located in communities with less than 5,000 population. The number of physicians in Alberta increased by 12 percent between 1979 and 1981. The physician-to-population ratio in 1981 was 1:725.

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[1] Source: Alberta Physician Data Bank. Only those physicians who were fully registered with the College of Physicians and Surgeons of Alberta and with in-province practice locations were included. The data do not include retired members, life members, physicians on the College's special, courtesy, or education registries, and registered physicians who were residing outside of Alberta.

Forty-three percent of the physicians registered in Alberta were graduates of the province's two medical schools. Slightly over one-fifth of the physicians graduated from other Canadian medical schools; and about 36 percent of the physicians were graduates of foreign medical schools.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Medical Association
#304, 9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Executive Director: Dr. R. Clark

b) Licensing, Registration, or Certification Authority:

College of Physicians and Surgeons of Alberta
9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Registrar: Dr. L. H. LeRiche

c) Legislation:

Under the authority of The Medical Profession Act, 1975, all physicians and osteopaths, who want to practise for the first time in the province, must register with the College of Physicians and Surgeons of Alberta. In addition, mandatory annual re-registration with the College is required of all physicians who want to continue practising in Alberta.

The College of Physicians and Surgeons of Alberta is responsible for regulating the conduct of physicians and osteopaths and for disciplining them when needed.

The Medical Profession Act sets the basic educational qualifications required for registration with the College. However, the College sets the post-basic educational qualifications required for registration as a medical specialist. The College also prescribes the educational qualifications and conditions of practice of physicians registered on its special registries.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PHYSICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	54	55,375	1: 1,025
2 (Lethbridge)	146	110,477	1: 757
3 (Pincher Creek)	34	35,652	1: 1,049
4 (Hanna)	9	12,119	1: 1,347
5 (Drumheller)	22	38,382	1: 1,745
6 (Calgary)[3]	45	75,939	1: 1,688
7 (Stettler)	26	40,071	1: 1,541
8 (Red Deer)	155	123,642	1: 798
9 (Banff)	24	21,670	1: 903
10 (Camrose)	66	78,417	1: 1,188
11 (Edmonton)[4]	67	104,984	1: 1,567
12 (Fort McMurray)	63	84,221	1: 1,337
13 (Whitecourt)	40	53,701	1: 1,343
14 (Hinton)	15	24,635	1: 1,642
15 (Grande Prairie)	93	128,639	1: 1,383
Census Metropolitan Area of Edmonton	1,284	657,057	1: 512
Census Metropolitan Area of Calgary	937	592,743	1: 633
PROVINCIAL TOTAL	3,080	2,237,724	1: 727

[1] Source: Alberta Physician Data Bank. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and with in-province practice locations. Excludes retired members, life members, physicians on the College's special, courtesy, or education registries, and registered physicians who were residing outside of Alberta.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 1B

NUMBER OF PHYSICIANS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1981

Communities By Size	Number Registered[1]	Population[2]	Physician-to-Population Ratios
Over 60,000			
Census Metropolitan Area of Calgary	938	592,743	1: 632
Census Metropolitan Area of Edmonton	1,283	657,057	1: 512
Between 10,000 and 60,000			
Lethbridge	117	54,072	1: 462
Medicine Hat	50	40,380	1: 808
Red Deer	96	46,393	1: 483
Fort McMurray	22	31,000	1:1,409
Grande Prairie	37	24,263	1: 656
Camrose	21	12,570	1: 599
Leduc	13	12,471	1: 959
Spruce Grove	11	10,326	1: 939
Between 5,000 and 10,000			
Wetaskiwin	20	9,597	1: 480
Hinton	7	8,342	1:1,192
Brooks	9	9,421	1:1,047
Drumheller	11	6,508	1: 592
Lloydminister	12	8,997	1: 750
Taber	7	5,988	1: 855
Under 5,000	426	707,596	1:1,661
TOTAL	3,080	2,237,724	1: 727

[1] Source: Alberta Physician Data Bank. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and with in-province practice locations. Excludes retired members, life members, physicians on the College's special, courtesy, or education registries, and registered physicians who were residing outside of Alberta.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSICIANS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	2,754	2,898	3,080
% Change in Number of Registered Personnel	1.5%	5.2%	6.3%
Number of New Registrants[2]	228	292	275
Attrition of Personnel (Number)[3]	123	135	93
Attrition Rate[4]	4.5%	4.9%	3.2%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:758	1:744	1:727
- Western Canada[6]	1:607	1:599	1:575
- Canada[7]	1:551	-	-

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[1] Source: Alberta Physician Data Bank. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and with in-province practice locations. Excludes retired members, life members, physicians on the College's special, courtesy, or education registries, and registered physicians who were residing outside of Alberta.

[2] Source: "Manpower Statistics," Alberta Health Care Insurance Plan. Figure refers only to "fee-for-service" physicians who were newly registered with the Plan. Not all practising physicians were registered with the Plan.

[3] Source: "Manpower Statistics," Alberta Health Care Insurance Plan. Figure refers only to "fee-for-service" physicians who left the Plan. Not all practising physicians were registered with the Plan.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincal population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[7] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, March 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Alberta has two medical schools which are located at the University of Alberta and the University of Calgary. The University of Alberta program is four years in length, based on a 9-month academic year; the University of Calgary program is three years in length, based on a 12-month academic year. The basic entry requirement to both programs is the successful completion of a 2-year pre-medicine program.

There were 183 graduates from the province's two medical schools in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSICIANS IN ALBERTA

	1977-79[1]	1979-80[1]	1980-81[1]
University of Alberta (length: 4 years)			
Actual Enrollments:			
1st Year	118	118	118
2nd Year	111	120	117
3rd Year	116	110	122
4th Year	119	115	109
Graduates:	119	115	109
University of Calgary (length: 3 years)			
Actual Enrollments:			
1st Year	73	72	73
2nd Year	71	75	71
3rd Year	73	67	75
Graduates:	71	67	74
PROVINCIAL TOTAL			
Training Programs (2)			
Actual Enrollments:			
1st Year	191	190	191
2nd Year	182	195	188
3rd Year	189	177	197
4th Year[2]	119	115	109
Graduates:	190	182	183

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] Enrollments in the 4th year apply only to the University of Alberta students as the University of Calgary program is three years in length.

b) Continuing Education Programs:

The Faculties of Medicine at the University of Alberta and the University of Calgary offer continuing medical education programs for physicians in Alberta. In addition, the Alberta Medical Association offers some continuing education programs for its members.

APPENDIX

TABLE 4A PHYSICIANS BY SPECIALTY AND PHYSICIAN-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1981[1]

Specialty	Number of Physicians	Physician-to-Population Ratios
Anaesthesia	119	1: 18,804
Anatomical Pathology	14	1: 159,837
Cardiology	12	1: 186,477
Cardiovascular & Thoracic Surgery	14	1: 159,837
Community Medicine	7	1: 319,675
Dermatology	19	1: 117,775
Gastroenterology	6	1: 372,934
General Pathology	55	1: 40,686
General Surgery	142	1: 15,759
Haematological Pathology	3	1: 745,908
Haematology	4	1: 559,431
Immunology	1	1:2,237,724
Internal Medicine	199	1: 11,245
Medical Biochemistry	3	1: 745,908
Microbiology	4	1: 559,431
Neurology	21	1: 106,558
Neuropathology	1	1:2,237,724
Neurosurgery	13	1: 172,133
Nuclear Medicine	2	1:1,118,862
Obstetrics & Gynaecology	109	1: 20,530
Ophthalmology	56	1: 39,959
Orthopaedic Surgery	61	1: 36,684
Otolaryngology	31	1: 72,185
Pediatrics	104	1: 21,517
Pediatrics General Surgery	4	1: 559,431
Physical Medicine & Rehabilitation	9	1: 248,636
Plastic Surgery	19	1: 117,775
Psychiatry	109	1: 20,530
Radiation Oncology	18	1: 124,318
Radiology - Diagnostic	101	1: 22,156
Respiratory Diseases	2	1:1,118,862
Rheumatology	5	1: 447,545
Urology	32	1: 69,929
Specialty Total	1,299	1: 1,723
General Practice	1,786	1: 1,253
GRAND TOTAL[2]	3,085	1: 725

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[1] Source: Alberta Physician Data Bank.

[2] The total number of physicians by specialty (i.e., 3,085) is slightly higher than the totals provided in Tables 1A and 1B (i.e., 3,080). This discrepancy may have been due to double counting of some physicians certified in more than one specialty.

TABLE 4B PHYSICIANS BY AGE, SPECIALTY, AND SEX, ALBERTA, 1981[1]

Specialty	Male			Female			Total			TOTAL
	-35	35-54	55+	-35	35-54	55+	-35	35-54	55+	
Anaesthesia	10	61	32	5	7	4	15	68	36	119
Anatomical Pathology	1	10	0	3	0	0	4	10	0	14
Cardiology	3	4	4	1	0	0	4	4	4	12
Cardiovascular & Thoracic Surgery	1	8	5	0	0	0	1	8	5	14
Community Medicine	2	4	0	0	0	1	2	4	1	7
Dermatology	4	11	2	1	1	0	5	12	2	19
Gastroenterology	1	4	0	1	0	0	2	4	0	6
General Pathology	2	34	16	0	3	0	2	37	16	55
General Surgery	7	79	55	0	1	0	7	80	55	142
Haematological Pathology	1	1	0	1	0	0	2	1	0	3
Haematology	1	3	0	0	0	0	1	3	0	4
Immunology	0	1	0	0	0	0	0	1	0	1
Internal Medicine	34	101	51	4	8	1	38	109	52	199
Medical Biochemistry	0	3	0	0	0	0	0	3	0	3
Microbiology (Bacteriology)	0	2	1	0	1	0	0	3	1	4
Neurology	1	13	4	2	1	0	3	14	4	21
Neuropathology	1	0	0	0	0	0	1	0	0	1
Neurosurgery	0	9	4	0	0	0	0	9	4	13
Nuclear Medicine	0	2	0	0	0	0	0	2	0	2
Obstetrics & Gynaecology	11	64	31	2	1	0	13	65	31	109
Ophthalmology	4	40	11	0	1	0	4	41	11	56
Orthopaedic Surgery	8	37	16	0	0	0	8	37	16	61
Otolaryngology	5	18	8	0	0	0	5	18	8	31
Pediatrics	10	55	20	6	11	2	16	66	22	104

TABLE 4B (cont'd)

Specialty	Male			Female			Total			TOTAL
	-35	35-54	55+	-35	35-54	55+	-35	35-54	55+	
Paediatrics Gen. Surgery	0	3	1	0	0	0	0	3	1	4
Physical Medicine & Rehabilitation	1	2	4	1	1	0	2	3	4	9
Plastic Surgery	4	11	4	0	0	0	4	11	4	19
Psychiatry	13	68	19	2	7	0	15	75	19	109
Radiation Oncology	1	8	6	0	2	1	1	10	7	18
Radiology - Diagnostic	10	62	23	1	5	0	11	67	23	101
Respiratory Diseases	0	2	0	0	0	0	0	2	0	2
Rheumatology	1	4	0	0	0	0	1	4	0	5
Urology	4	20	8	0	0	0	4	20	8	32
Total Specialty	141	744	325	30	50	9	171	794	334	1,299
General Practice	512	640	341	168	99	26	680	739	367	1,786
GRAND TOTAL	653	1,384	666	198	149	35	851	1,533	701	3,085

[1] Source: Alberta Physician Data Bank.

TABLE 5A

NUMBER OF GRADUATES OF ALBERTA MEDICAL SCHOOLS WORKING IN ALBERTA BY YEAR OF GRADUATION, SPECIALTY, AND SEX AS OF DECEMBER 31, 1981[1]

SPECIALTY	Years of Graduation																										
	Before 1970		1970		1971		1972		1973		1974		1975		1976		1977[2]		1978[2]		1979[2]		1980[2]		TOTAL		SPECIALTY TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Anaesthesia	29	4	1	-	1	-	3	-	2	-	2	1	2	1	-	-	-	-	-	-	-	-	-	-	40	6	46
Anatomical Pathology	4	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	1	6
Cardiology	2	-	-	-	-	-	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	4	1	5
Cardiovascular/Thoracic Surgery	3	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	4
Dermatology	8	-	-	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	12	-	12
Gastroenterology	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3
General Pathology	19	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	20	-	20
General Surgery	39	-	1	-	1	-	2	-	1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	48	-	48
Haematological Pathology	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1	2
Internal Medicine	53	3	-	-	2	-	1	-	5	1	3	-	3	2	1	-	-	-	-	-	-	-	-	-	68	6	74
Microbiology	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Neurology	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	6
Neuropathology	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Neurosurgery	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	7
Nuclear Medicine	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Obstetrics & Gynaecology	29	-	-	1	-	-	2	1	2	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	35	2	37
Ophthalmology	22	-	1	1	1	-	1	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	28	1	29
Orthopaedic Surgery	27	-	2	-	-	-	-	-	4	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	35	-	35
Otolaryngology	14	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	16
Pediatrics	27	4	1	-	-	-	-	-	3	-	3	1	1	1	1	-	-	-	-	-	-	-	-	-	36	6	42
Pediatrics General Surgery	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Physical Medicine & Rehab.	3	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	4
Plastic Surgery	9	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	12
Psychiatry	18	3	2	-	4	-	1	-	2	1	2	1	2	-	1	-	-	-	-	-	-	-	-	-	32	5	37
Radiation Oncology	5	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	6
Radiology-Diagnostic	19	2	-	-	1	-	3	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	25	3	28
Respiratory Disease	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Rheumatology	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Urology	18	-	-	-	-	-	-	-	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	22	-	22
Specialty Total	365	16	10	2	16	1	15	2	30	4	20	5	11	5	6	-	1	-	-	-	-	-	-	-	475	34	509
General Practice	223	24	30	4	30	6	35	10	38	5	48	7	46	8	47	18	64	23	63	31	48	16	-	-	672	152	824
GRAND TOTAL	588	40	40	6	46	7	50	12	68	9	68	12	57	13	53	18	65	23	63	31	48	16	-	-	1147	186	1333

[1] Source: Alberta Physician Data Bank.

[2] 1977 - 1980 graduates would still be undergoing their internship or residency training.

TABLE 58

NUMBER OF GRADUATES OF THE UNIVERSITY OF ALBERTA MEDICAL SCHOOL WORKING IN ALBERTA BY YEAR OF GRADUATION, SPECIALTY, AND SEX AS OF DECEMBER 31, 1981[1]

	Years of Graduation																										
SPECIALTY	Before 1970		1970		1971		1972		1973		1974		1975		1976[2]		1977[2]		1978[2]		1979[2]		1980[2]		TOTAL		SPECIALTY TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Anaesthesia	29	4	1	-	1	-	3	-	2	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	38	5	43
Anatomical Pathology	4	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	5
Cardiology	2	-	-	-	-	-	1	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	4	1	5
Cardiovascular/Thoracic Surgery	3	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	4
Dermatology	8	-	-	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	11	-	11
Gastroenterology	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3
General Pathology	19	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	20	-	20
General Surgery	39	-	1	-	1	-	2	-	1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	48	-	48
Haematological Pathology	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1	2
Internal Medicine	53	3	-	-	2	-	1	-	3	1	1	-	3	1	1	-	-	-	-	-	-	-	-	-	64	5	69
Microbiology	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Neurology	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	6
Neuropathology	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Neurosurgery	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	7
Nuclear Medicine	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Obstetrics & Gynaecology	29	-	2	1	-	-	-	1	2	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	35	2	37
Ophthalmology	22	-	1	1	1	-	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	27	1	28
Orthopaedic Surgery	27	-	2	-	-	-	-	-	3	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	34	-	34
Otolaryngology	14	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	16
Pediatrics	27	4	1	-	-	-	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	30	6	36
Pediatrics General Surgery	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Physical Medicine & Rehab.	3	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	4
Plastic Surgery	9	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	12
Psychiatry	18	3	2	-	4	-	1	-	2	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-	30	4	34
Radiation Oncology	5	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	6
Radiology-Diagnostic	19	2	-	-	1	-	3	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	23	3	26
Respiratory Disease	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Rheumatology	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Urology	18	-	-	-	-	-	-	-	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	22	-	22
Specialty Total	365	16	12	2	16	1	13	2	21	3	11	4	12	2	4	-	1	-	-	-	-	-	-	-	455	30	485
General Practice	223	24	30	4	30	6	35	10	36	4	40	7	34	8	34	12	49	15	49	16	37	10	-	-	597	116	713
GRAND TOTAL	588	40	42	6	46	7	48	12	57	7	51	11	46	10	38	12	50	15	49	16	37	10	-	-	1052	146	1198

[1] Source: Alberta Physician Data Bank.

[2] 1976 - 1980 graduates would still be undergoing their internship or residency training.

TABLE 5C

NUMBER OF GRADUATES OF THE UNIVERSITY OF CALGARY MEDICAL SCHOOL WORKING IN ALBERTA BY YEAR OF GRADUATION, SPECIALTY, AND SEX AS OF DECEMBER 31, 1981[1]

PECIALTY	Year of Graduation 1973 M	F	1974 M	F	1975 M	F	1976 M	F	1977[2] M	F	1978[2] M	F	1979[2] M	F	TOTAL M	F	SPE-CIALTY TOTAL
naesthesia	-	-	2	-	-	-	1	-	-	-	-	-	-	-	2	1	3
natomical athology	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
ermatology	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1
nternal Medicine	2	-	2	-	-	1	-	-	-	-	-	-	-	-	4	1	5
phthalmology	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1
rthopaedic urgery	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
ediatrics	3	-	3	-	-	-	-	-	-	-	-	-	-	-	6	-	6
sychiatry	-	-	1	1	-	-	1	-	-	-	-	-	-	-	2	1	3
diology iagnostic	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-	2
eumatology	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
tal Speciality	7	1	11	1	-	1	3	-	-	-	-	-	-	-	20	4	24
neral Practice	2	1	8	-	12	-	13	6	15	8	14	15	11	6	75	36	111
AND TOTAL	9	2	19	1	12	1	16	6	15	8	14	15	11	6	95	40	135

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[1] Source: Alberta Physician Data Bank.

[2] 1977 - 1979 graduates would still be undergoing their internship or residency training.

PHYSIOTHERAPISTS

I. OVERVIEW

Definition: Plan and carry out programs of physical treatment, in consultation with physicians and other health care workers, to rehabilitate injured or disabled patients. Administer muscle, nerve, joint and functional ability tests to identify physical problems of patient. Assess patient's symptoms and capabilities. Direct and aid patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility. Guide patient in remedial activities involving use of parallel bars, weights, traction and other equipment. Gives whirlpool and contrast baths and applies moist packs. Administer treatments, using diathermy, ultrasonic and microwave machines, infra-red and ultra-violet lamps, low-voltage generators and other electrotherapeutic equipment. Instructs patients and their families in procedures to be continued at home. Record treatments given and patient's response and progress.

(Source: No. 3137, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Association of Chartered Physiotherapists of Alberta is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 534 practising physiotherapists in Alberta.[1] About 74 percent of the practising physiotherapists were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for 56 percent of Alberta's population. The provincial physiotherapist-to-population ratio in 1981 was 1:4,190.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel in Alberta," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Association of Chartered Physiotherapists of Alberta
2nd Floor, 10444 - 82 Avenue
Edmonton, Alberta
T6E 2A2

President: Ms. Marion Briggs

b) Licensing, Registration, or Certification Authority:

Association of Chartered Physiotherapists of Alberta
2nd Floor, 10444 - 82 Avenue
Edmonton, Alberta
T6E 2A2

c) Legislation:

No legislation exists in Alberta requiring mandatory registration of all physiotherapists practising in the province. However, under the authority of the Chartered Physiotherapists Act, all individuals, who want to practise for the first time under the title of "chartered physiotherapist" in the province, must register with the Association of Chartered Physiotherapists of Alberta (A.C.P.A.). In addition, mandatory annual re-registration with the Association is required of all physiotherapists who want to continue using the title of "chartered physiotherapist." The A.C.P.A. is responsible for regulating the conduct of its members and for disciplining them when needed.

The Council of the Association of Chartered Physiotherapists of Alberta sets the basic educational qualifications required for registration with the Association. With regard to qualifications for membership, all members of the Canadian Physiotherapists Association and graduates in physiotherapy from Canadian universities are presently eligible for membership in the A.C.P.A. Others must apply to the Universities Coordinating Council for examination of qualifications for membership in the Association.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING PHYSIOTHERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	55,375	1: 4,260
2 (Lethbridge)	25	110,477	1: 4,419
3 (Pincher Creek)	3	35,652	1:11,884
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	2	38,382	1:19,191
6 (Calgary)[3]	7	75,939	1:10,848
7 (Stettler)	5	40,071	1: 8,014
8 (Red Deer)	25	123,642	1: 4,946
9 (Banff)	3	21,670	1: 7,223
10 (Camrose)	12	78,417	1: 6,535
11 (Edmonton)[4]	7	104,984	1:14,998
12 (Fort McMurray)	9	84,221	1: 9,358
13 (Whitecourt)	7	53,701	1: 7,672
14 (Hinton)	4	24,635	1: 6,159
15 (Grande Prairie)	18	128,639	1: 7,147
Census Metropolitan Area of Edmonton	234	657,057	1: 2,808
Census Metropolitan Area of Calgary	159	592,743	1: 3,728
PROVINCIAL TOTAL	534	2,237,724	1: 4,190

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel in Alberta," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSIOTHERAPISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	527[1]	487[2]	534[3]
% Change in Number of Practising Personnel	-	-7.6%	9.7%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:3,963	1:4,426	1:4,190
- Western Canada[5]	1:3,082	1:3,087	1:2,999
- Canada[6]	1:7,422	-	-

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[5] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Saskatchewan data obtained from Peat, Marwick and Partners. The figures from British Columbia, Saskatchewan and Manitoba refer to personnel registered in the respective associations, whereas the data from Alberta refer to the number of practising personnel.

[6] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to 1977, both a three-year diploma program and a four-year baccalaureate degree program in physical therapy were offered at the University of Alberta. Only the four-year baccalaureate degree program is now offered at the University of Alberta. In 1980-81 there were 47 graduates from the program.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSIOTHERAPISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
University of Alberta (length: 4 years)			
Actual Enrollments:			
1st Year	40	40	40
2nd Year	34	36	40
3rd Year	31	33	33
4th Year[2]	85	56	58
Graduates:	60	62	47

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] Increases in the fourth year enrollments were due to graduates of the diploma program returning to complete the baccalaureate degree program. In 1978-79 there were 49 full-time students and 36 part-time students. In 1979-80, there were 56 full-time students. In 1980-81, there were 40 full-time students and 18 part-time students.

b) Continuing Education Programs:

The Department of Physiotherapy at the University of Alberta offers a baccalaureate program for physiotherapists wishing to upgrade their educational qualifications. The A.C.P.A. provided its members with two courses on statistics in 1981.

In addition, those persons wishing to re-enter the profession after a prolonged period of absence may apply to the A.C.P.A for information regarding refresher courses. While completion of refresher courses prior to re-entering the work force is not mandatory, the A.C.P.A. strongly recommends that therapists returning to work following a prolonged absence avail themselves of opportunities to refresh theoretical and practical knowledge.

PODIATRISTS

I. OVERVIEW

Definition: A Podiatrist treats ailments, diseased conditions, deformities or injuries of the human foot and the leg muscles controlling the foot; examines, diagnoses and treats such ailments, conditions, deformities or injuries but does not treat systemic diseases of bones, muscles or ligaments, or does not use X-ray equipment for purposes other than diagnostic, or does not use anaesthetics other than local.

(Source: The Podiatry Act, 1964, Ch. 69, S. 2; 1968, Ch. 78, S. 2)

Thirteen podiatrists were actively registered with the Alberta Podiatry Association (A.P.A.) in 1981.[1] All of these personnel practised in Lethbridge, Medicine Hat and the Census Metropolitan Areas of Edmonton and Calgary. The number of podiatrists practising in Alberta has not changed from 1978 to 1981. The provincial podiatrist-to-population ratio was 1:172,133 in 1981.

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[1] Source: Alberta Podiatry Association.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Podiatry Association
c/o Dr. J. Greif
215 North Hill Shopping Centre
Calgary, Alberta
T2N 1M7

President: Dr. Richard W. Antoniuk

b) Licensing, Registration, or Certification Authority:

Board of Examiners for Podiatry
c/o Health and Social Services
Professions and Occupations
8th Floor, South Tower
Seventh Street Plaza
10030 - 107 Street
Edmonton, Alberta
T5J 3E4

and

Alberta Podiatry Association
c/o Dr. J. Greif
215 North Hill Shopping Centre
Calgary, Alberta
T2N 1M7

c) Legislation:

Under the authority of The Podiatry Act, all individuals, who want to practise for the first time as podiatrists in the province, must apply to the Board of Examiners for Podiatry (a provincial government certification body). The Board determines whether or not the applicants are eligible to practise in Alberta. If the applicants are eligible, then the Board issues a certificate of approval for registration. All successful applicants then must register with the A.P.A. In addition, mandatory annual re-registration with the Association is required of all podiatrists who want to continue practising in Alberta.

The A.P.A. is also responsible for regulating the conduct of podiatrists and for disciplining them when needed. The Alberta Board of Examiners for Podiatry sets the basic educational qualifications required for registration with the Association.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PODIATRISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	40,380	1: 40,380
2 (Lethbridge)	1	54,072	1: 54,072
Census Metropolitan Area of Edmonton	3	657,057	1:219,019
Census Metropolitan Area of Calgary	8	592,743	1: 74,093
PROVINCIAL TOTAL	13	2,237,724	1:172,133

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1981.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PODIATRISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	13	13	13
% Change in Number of Registered Personnel	8.3%	0.0%	0.0%
Number of New Registrants[2]	1	0	2
Attrition of Personnel (Number)[3]	0	0	2
Attrition Rate[4]	-	-	15.4%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:160,648	1:165,809	1:172,133
- Western Canada[6]	-	1:105,558	1: 92,996
- Canada[7]	1: 87,859	-	-

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1979, 1980 and 1981.

[2] Source: Alberta Podiatry Association.

[3] Source: Alberta Podiatry Association. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba 1981; Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[7] Source: Canada Health Manpower Inventory, 1980. Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no training programs for podiatrists in Canada. The United States has five podiatry schools which offer four-year training programs in podiatry following two years of university preparation.

b) Continuing Education Programs:

The Alberta Podiatry Association provides continuing education programs for podiatrists through lectures presented at the Association's semi-annual meetings and annual regional conventions. There are also various seminars, workshops, clinics, lectures, and conventions held in the United States, which the province's podiatrists frequently attend.

PROSTHETISTS AND ORTHOTISTS

I. Overview

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding and machine- and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Source: No. 3159, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Association of Prothetists and Orthotists is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 19 prosthetists and orthotists practising in Alberta.[1] All of these personnel were located in the Census Metropolitan Areas of Edmonton and Calgary. The provincial prosthetist/orthotist-to-population ratio in 1981 was 1:117,775.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Prosthetists and Orthotists
c/o Northern Alberta Limb (1979) Co. Ltd.
11029 - 127 Street
Edmonton, Alberta
T5M 0T3

President: Mr. Charles Moe

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating prosthetists and orthotists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING PROSTHETISTS AND ORTHOTISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
Census Metropolitan Area of Edmonton	9	657,057	1: 73,006
Census Metropolitan Area of Calgary	10	592,743	1: 59,274
PROVINCIAL TOTAL	19	2,237,724	1:117,775

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PROSTHETISTS AND ORTHOTISTS IN ALBERTA, 1979, 1980, and 1981

	1979	1980	1981
Number of Registered or Practising Personnel	18[1]	21[2]	19[3]
% Change in Number of Registered or Practising Personnel[4]	10.5%	16.7%	-9.5%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratio: - Alberta	1:112,644	1: 99,654	1:117,775

[1] Source: Alberta Association of Prothetists and Orthotists. Number of active members registered with the Alberta Association of Prothetists and Orthotists as of December 31, 1979. Excludes out-of-province, inactive, honorary, and retired members.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Since personnel figures for 1979, 1980, and 1981 are from different sources, they are not comparable. The figure for 1979 refers to registered personnel as opposed to the 1980 and 1981 figures which refer to practising personnel.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Educational Programs:

There are no formal training programs for prosthetists and orthotists in Alberta. Although most of the prosthetists and orthotists in the province are trained on-the-job, in 1980 Alberta made an inter-provincial training agreement with the British Columbia Institute of Technology and the Government of British Columbia for the training of prothetists and orthotists. The agreement was for Alberta to purchase two training places per year in 1980, 1982, and 1984 in the two-year program at the British Columbia Institute of Technology.

b) Continuing Education Programs:

There are no continuing education programs for prosthetists and orthotists in Alberta.

PSYCHIATRIC NURSES

I. OVERVIEW

Definition: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes. Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build up self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community.

(Source: No. 3131, Canadian Classifications and Dictionary of Occupations, 1980 - Revision)

Since registration with the Psychiatric Nurses Association of Alberta is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 688 practising psychiatric nurses in Alberta.[1] Most of the practising psychiatric nurses were located in the Town of Ponoka in Census Division 8 and in the Census Metropolitan Area of Edmonton (the locations of Alberta's two psychiatric hospitals). These two regions together accounted for 82 percent of the province's psychiatric nurses. The provincial psychiatric nurse-to-population ratio in 1981 was 1:3,253. It should be noted that psychiatric nursing service can also be provided by registered nurses.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982. The survey probably somewhat understated the number of practising personnel as at least one major hospital includes psychiatric nurses under a different manpower category (i.e. mental health workers).

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Psychiatric Nurses Association of Alberta
P. O. Box 755
Ponoka, Alberta
TOC 2HO

Executive Director: Mr. E.S. Neufeldt

b) Licensing, Registration, or Certification Authority:

Advisory Committee of the Psychiatric
Nursing Training Act
c/o Health and Social Services
Professions and Occupations
8th Floor, Seventh Street Plaza, South Tower
10030 - 107th Street
Edmonton, Alberta
T5J 3E4

c) Legislation:

The Psychiatric Nursing Training Act restricts the field of practice of psychiatric nursing to people certified by the Advisory Committee constituted by the Psychiatric Nursing Training Act and to registered or graduate nurses.[1] A certificate of qualification in psychiatric nursing is issued to candidates who have taken required courses of study or equivalent training outside of the province. The Advisory Committee can cancel the certification of any psychiatric nurse if there is adequate cause for such a cancellation. Also, the Advisory Committee is responsible for setting the educational qualifications required for certification as a psychiatric nurse under the Act.

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[1] Family members of a mentally ill person, people employed as domestics who do not hold themselves out to be psychiatric nurses, orderlies and licensed nursing aides (now called registered nursing assistants) are also exempted under the Act.

Under the authority of the Psychiatric Nurses Association Act, registration with the Psychiatric Nurses Association of Alberta (P.N.A.A.) is voluntary. The P.N.A.A. is responsible for regulating the conduct and discipline of its members and registration is on an annual basis. No person can be registered with the Association on an active basis unless he/she has practised psychiatric nursing for at least one full year within the five years immediately preceding the date of application for membership.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Psychiatric Nurses Association of Alberta
P. O. Box 755
Ponoka, Alberta
T0C 2H0

Executive Director: Mr. E.S. Neufeldt

b) Licensing, Registration, or Certification Authority:

Advisory Committee of the Psychiatric
Nursing Training Act
c/o Health and Social Services
Professions and Occupations
8th Floor, Seventh Street Plaza, South Tower
10030 - 107th Street
Edmonton, Alberta
T5J 3E4

c) Legislation:

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III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING PSYCHIATRIC NURSES
AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	55,375	1: 55,375
2 (Lethbridge)	13	110,477	1: 8,498
3 (Pincher Creek)	4	35,652	1: 8,913
4 (Hanna)	0	12,119	-
5 (Drumheller)	2	38,382	1: 19,191
6 (Calgary)[3]	1	75,939	1: 75,939
7 (Stettler)	1	40,071	1: 40,071
8 (Red Deer)	266	123,642	1: 465
9 (Banff)	0	21,670	-
10 (Camrose)	13	78,417	1: 6,032
11 (Edmonton)[4]	1	104,984	1:104,984
12 (Fort McMurray)	7	84,221	1: 12,032
13 (Whitecourt)	1	53,701	1: 53,701
14 (Hinton)	2	24,635	1: 12,318
15 (Grande Prairie)	8	128,639	1: 16,080
Census Metropolitan Area of Edmonton	299	657,057	1: 2,198
Census Metropolitan Area of Calgary	69	592,743	1: 8,590
PROVINCIAL TOTAL	688	2,237,724	1: 3,253

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982. The survey probably somewhat understated the number of practising personnel as at least one major hospital includes psychiatric nurses under a different manpower category (i.e., mental health workers).

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHIATRIC NURSES IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	757[1]	744[2]	688[3]
% Change in Number of Practising Personnel	-	-1.7%	-7.5%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 2,678	1: 2,813	1: 3,253
- Western Canada[5]	1: 1,346	-	1: 1,533

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[5] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Manitoba Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The figures from British Columbia, Saskatchewan and Manitoba refer to personnel registered in the respective associations, whereas the data from Alberta refer to the number of practising personnel.

IV. Educational Programs

a) Basic Educational Programs

Basic education programs for psychiatric nurses in Alberta are offered by two institutions: Alberta Hospital, Edmonton and Alberta Hospital, Ponoka. Both hospital-based programs are two years in length. Before they are eligible for certification, students must pass the provincial examinations which are administered by Dr. V. Nyberg, Department of Educational Psychology, the University of Alberta. There were 53 graduates from the two programs in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PSYCHIATRIC NURSES IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Alberta Hospital - Edmonton **(length: 2 years)**			
Actual Enrollments:			
1st Year	33	31	48
2nd Year	18	23	22
Graduates:	18	21	22
Alberta Hospital - Ponoka **(length: 2 years)**			
Actual Enrollments:			
1st Year	28	34	38
2nd Year	28	31	24
Graduates:	25	17	31
PROVINCIAL TOTAL			
Training Programs (2)			
Actual Enrollments:			
1st Year	61	65	86
2nd Year	46	54	46
Graduates:	43	38	53

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81. Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs

The two hospital-based schools of psychiatric nursing do not offer continuing education programs for psychiatric nurses. Alberta Hospital, Edmonton and Alberta Hospital, Ponoka, however, offer seminars and workshops through their continuing education departments. The Psychiatric Nurses Association of Alberta does not offer continuing education programs.

PSYCHOLOGISTS

I. OVERVIEW

Definition: A psychologist collects, interprets and applies scientific data for the purpose of investigating psychological phenomena and formulating and applying psychological principles and laws in predicting and controlling behaviour in society.

Studies human behaviour and mental processes and investigates and recommends or provides treatment of psychological problems. Plans and carries out experiments using human beings and animal subjects, observes behaviour, and measures mental and physical characteristics. Analyzes effects of hereditary, and environmental factors on individual thought and behaviour. Undertakes diagnosis, treatment and prevention of personality disorders and problems of maladjustment to social and occupational environment.

(Source: No. 2315, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

As of December 31, 1981, there were 829 certified psychologists in Alberta; however, not all of these personnel were practising in the health and social service sector.[1] According to the employer survey conducted by the Alberta Health and Social Service Disciplines Committee there were 469 certified psychologists practising in the health and social service sector as of September 30, 1981.[2] Eighty-three percent of these personnel resided in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The number of certified psychologists in Alberta increased by about 16 percent between 1979 and 1981. The provincial certified psychologist-to-population ratio in 1981 was 1:2,699.

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[1] Source: Psychologists Association of Alberta.

[2] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Psychologists Association of Alberta
5-157 Education Building II
The University of Alberta
Edmonton, Alberta
T6G 2E1

Registrar: Dr. James A. Browne

b) Licensing, Registration, or Certification Authority:

Psychologists Association of Alberta
5-157 Education Building II
The University of Alberta
Edmonton, Alberta
T6G 2E1

c) Legislation:

Under the authority of The Psychologists Act, all individuals, who want to practise for the first time under the title of "certified psychologist" or "psychologist" in the province, must be registered with the Psychologists Association of Alberta (P.A.A.). Mandatory annual re-registration with the P.A.A. is required of all certified psychologists who want to continue practising in Alberta. However, actual membership in the P.A.A. is voluntary.

The P.A.A. is responsible for the conduct and discipline of members and certified psychologists. In addition, the Association sets the basic educational qualifications required for membership. Assessment and approval of academic qualifications for registration as a certified psychologist are performed by the Office of Professional Examinations, the Universities Coordinating Council.

III. PERSONNEL DATA

TABLE 1 NUMBER OF CERTIFIED PSYCHOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	55,375	1: 9,229
2 (Lethbridge)	27	110,477	1: 4,092
3 (Pincher Creek)	2	35,652	1:17,826
4 (Hanna)	1	12,119	1:12,119
5 (Drumheller)	3	38,382	1:12,794
6 (Calgary)[3]	14	75,939	1: 5,424
7 (Stettler)	2	40,071	1:20,036
8 (Red Deer)	41	123,642	1: 3,016
9 (Banff)	1	21,670	1:21,670
10 (Camrose)	3	78,417	1:26,139
11 (Edmonton)[4]	18	104,984	1: 5,832
12 (Fort McMurray)	10	84,221	1: 8,422
13 (Whitecourt)	3	53,701	1:17,900
14 (Hinton)	2	24,635	1:12,318
15 (Grande Prairie)	9	128,639	1:14,293
Census Metropolitan Area of Edmonton	368	657,057	1: 1,785
Census Metropolitan Area of Calgary	319	592,743	1: 1,858
PROVINCIAL TOTAL	829	2,237,724	1: 2,699

[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the Association and residing in Alberta as of December 31, 1981. Excludes associate members and student affiliates.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHOLOGISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	712	763	829
% Change in Number of Registered Personnel	6.8%	7.2%	8.7%
Number of New Registrants[2]	79	107	94
Attrition of Personnel (Number)[3]	34	26	42
Attrition Rate[4]	5.1%	3.7%	5.5%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 2,933	1: 2,825	1: 2,699

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[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the Association as of December 31, 1979, 1980, and 1981. Excludes inactive, out-of-province, honorary, and retired members. Although the registration figures exclude inactive, out-of-province, honorary, and retired members, it was not possible to make this distinction in compiling of data on membership gains and losses. As a result the net increase of membership does not equal the number of new registrants less the attrition of personnel.

[2] Source: Psychologists Association of Alberta. Number of new registrants includes all categories of membership and members not residing in Alberta.

[3] Source: Psychologists Association of Alberta. Number of personnel registered in the previous year but did not renew their registration during that year. Includes all categories of membership and members not residing in Alberta.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Alberta has six masters programs in psychology: the Masters of Science program at the University of Calgary, the Masters of Arts and Masters of Science programs at the University of Alberta, the Masters of Education program in Educational Psychology at the Universities of Alberta and Calgary and the Masters of Science program in Educational Psychology at the University of Calgary. In 1980-81, there were 70 graduates from these six masters programs.

In addition, the Universities of Alberta and Calgary have Ph.D. programs in both psychology and educational psychology. There were 36 graduates from these four Ph.D. Programs in 1980-81.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
A. MASTERS PROGRAMS			
University of Alberta Masters of Arts in Psychology (length: 2 years)			
Actual Enrollments:[2]	12	14	9
Graduates:	4	4	4
University of Alberta Masters of Science in Psychology (length: 2 years)			
Actual Enrollments:[2]	4	9	15
Graduates:	2	1	3

TABLE 3 (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
University of Alberta Masters of Education in Educational Psychology (length: variable)			
Actual Enrollments:[2]	105	134	144
Graduates:	18	35	28
University of Calgary Masters of Science in Psychology (length: 2 years)			
Actual Enrollments:[2]	21	15	17
Graduates:	8	8	9
University of Calgary Masters of Education in Educational Psychology (length: variable)			
Actual Enrollments:[2]	41	54	35
Graduates:	5	6	8
University of Calgary Masters of Science in Educational Psychology (length: variable)			
Actual Enrollments:[2]	85	80	28
Graduates:	21	23	18
PROVINCIAL TOTAL:			
Masters Programs (6)			
Actual Enrollments:[2]	268	306	248
Graduates:	58	77	70

TABLE 3 (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
B. Ph.D. PROGRAMS			
University of Alberta Ph.D. In Psychology (length: variable)			
Actual Enrollments:[2]	4	21	21
Graduates:	1	3	6
University of Alberta Ph.D. in Educational Psychology (length: variable)			
Actual Enrollment:[2]	93	83	92
Graduates:	20	13	20
University of Calgary Ph.D. in Psychology (length: variable)			
Actual Enrollments:[2]	13	11	14
Graduates:	1	3	3
University of Calgary Ph.D. in Educational Psychology (length: variable)			
Actual Enrollments:[2]	41	78	16
Graduates:	4	7	7
PROVINCIAL TOTAL			
Ph.D. Programs (4)			
Actual Enrollments:[2]	151	193	143
Graduates:	26	26	36

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] Enrollment figures include both full-time and part-time students.

b) Continuing Education Programs:

Continuing education courses in psychology are offered through the Faculties of Extension at the Universities of Alberta and Calgary. In addition, the Psychologists Association of Alberta offers some workshops for its members and was involved in the planning of a conference.

PUBLIC HEALTH INSPECTORS

I. OVERVIEW

Definition:	To effect compliance with laws and regulations governing health standards, and to achieve this end, perform any combination of the following duties: Locate persons suspected of exposure to communicable disease; interview persons exposed to communicable disease to secure information on possible contacts; advise contacts to seek medical treatment. Inspect food and seize and dispose of any food or animal injurious to health. Inspect food establishments, housing, water supplies, sewage disposal sites, waste disposal sites, recreational areas, and other public places. Take samples of food, water, and air, and order chemical, physical, biological, and bacteriological tests as appropriate, and interpret test results. Carry out procedures to ensure permits required by law are held. Initiate measures to control animal and insect vectors. Promote health through information and education programs. (Source: Canadian Institute of Public Health Inspectors)

Since registration with the Canadian Institute of Public Health Inspectors is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 120 practising public health inspectors in Alberta.[1] About 53 percent of the practising public health inspectors were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of Alberta's population. The provincial public health inspector-to-population ratio in 1981 was 1:18,648.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Canadian Institute of Public Health Inspectors
215 Coachside Road, N.W.
Calgary, Alberta
T3H 1L6

President, Alberta Branch: Mr. Sam Dymianiw

b) Licensing, Registration, or Certification Authority:

Board of Certification of Public Health Inspectors
Ottawa-Carleton Regional Health Unit
1827 Woodward Drive
Ottawa, Ontario
K2C 0R5

Board Chairman: Mr. Phillip Barton, C.P.H.I.(C)

c) Legislation:

Public health inspectors in Alberta are regulated under The Public Health Act. According to The Public Health Act, all individuals, who wish to practise as public health inspectors, must be certified by the Board of Certification of Public Health Inspectors which is administered by the Canadian Institute of Public Health Inspectors. This requirement, however, does not apply to persons who became public health inspectors prior to January 1, 1961 and who have continued in such positions since that date.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING PUBLIC HEALTH INSPECTORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	55,375	1:11,075
2 (Lethbridge)	6	110,477	1:18,413
3 (Pincher Creek)	2	35,652	1:17,826
4 (Hanna)	2	12,119	1: 6,060
5 (Drumheller)	2	38,382	1:19,191
6 (Calgary)[3]	2	75,939	1:37,970
7 (Stettler)	4	40,071	1:10,018
8 (Red Deer)	6	123,642	1:20,607
9 (Banff)	0	21,670	-
10 (Camrose)	3	78,417	1:26,139
11 (Edmonton)[4]	5	104,984	1:20,997
12 (Fort McMurray)	4	84,221	1:21,055
13 (Whitecourt)	4	53,701	1:13,425
14 (Hinton)	4	24,635	1: 6,159
15 (Grande Prairie)	7	128,639	1:18,377
Census Metropolitan Area of Edmonton	37	657,057	1:17,758
Census Metropolitan Area of Calgary	27	592,743	1:21,953
PROVINCIAL TOTAL	120	2,237,724	1:18,648

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PUBLIC HEALTH INSPECTORS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered or Practising Personnel	96[1]	105[1]	120[2]
% Change in Number of Registered or Practising Personnel[3]	11.6%	9.4%	14.3%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:21,754	1:20,529	1:18,648
- Western Canada[5]	1:15,854	1:16,031	1:15,395
- Canada[6]	1:27,149	-	-

[1] Source: Canadian Institute of Public Health Inspectors (C.I.P.H.I.), Alberta Branch. Number of registered members of the Alberta Branch of C.I.P.H.I. Excludes out-of-province, honorary, inactive, and retired members.

[2] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[3] Since personnel figures for 1979, 1980, and 1981 were from different sources, they are not comparable. The figures for 1979 and 1980 refer to registered personnel as opposed to the 1981 figure which refers to practising personnel.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[5] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba 1981, Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The figures from British Columbia, Saskatchewan and Manitoba refer to personnel registered in the respective associations, whereas the 1981 figure from Alberta refers to the number of practising personnel.

[6] Source: Canada Health Manpower Inventory, 1980, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, March 1981.

IV EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for public health inspectors in Alberta. The British Columbia Institute of Technology in Vancouver, the Ryerson Polytechnical Institute in Toronto, and College Regional Bourghemin in St. Hyacinthe, Quebec offer two-year diploma programs in public health inspection. In addition, Ryerson Polytechnical Institute offers a four-year baccalaureate degree program in environmental health.

b) Continuing Education Programs:

There are no continuing education programs for public health inspectors in Alberta.

RADIOLOGICAL TECHNICIANS

I. OVERVIEW

Definition: Radiological Technicians (Diagnostic)

Operate radiography equipment to produce pictures of body structures for diagnostic purposes. Explain treatment and reassure patients. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cinefluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theater or other specialized area to assist physician or surgeon.

(Source: No. 3155, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Radiological Technicians (Therapy)

Administer radiation treatment to patients as prescribed by radiation oncologist. Explain treatment and reassure patients. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam. Observe patient through window or on closed circuit television during treatment. Notify radiation onologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Process or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities.

(Source: No. 3155, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Nuclear Medicine Technicians

Prepare radioactive solutions and reagents and operates scanning equipment for diagnostic purposes. Perform assays and quality-control tests on radioactive materials. Calculate doses to be administered

> by physician. Position patient and calibrate scanning equipment. Operate radiation-scanning equipment to produce photographic image of irradiated area. Calculate blood volume and red-cell survival, using geiger counter, electroscope, scaler, scintillation and position scanner and scintogram. Monitor oscilloscope images and study photographic images to determine if further scanning is required. Perform radioisotope scanning of pathological specimens and blood samples.
>
> (Source: No. 3155, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Association of Medical Radiation Technologists (A.A.M.R.T.) is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 685 radiological technicians practising in Alberta:[1] 613 of these were radiological technicians (diagnostic), 42 were radiological technicians (therapy), and 30 were nuclear medicine technicians. Seventy percent of all radiological technicians were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The provincial radiological technician-to-population ratio in 1981 was 1:3,267.

In addition to radiological technicians, combined laboratory and x-ray technicians provide some basic x-ray services, especially in small rural hospitals (see Chapter 5).

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Medical Radiation Technologists
1521 - 13 Street South
Lethbridge, Alberta
T1K 1T4

National Director: Ms. Georgina C. Poulsen, RT, AC

b) Licensing, Registration, or Certification Authority:

Medical Radiological Technicians Board
(not currently operating)

c) Legislation:

Under the authority of The Radiological Technicians Act, all individuals, who want to practise for the first time as medical radiological technicians in the province, must be registered with the Medical Radiological Technicians Board (a provincial government licensing body). In addition, mandatory annual re-registration with the Board is required of all medical radiological technicians who want to continue practising in Alberta.

The Board is responsible for regulating the conduct of all radiological technicians and for disciplining them when needed. Also, the Board sets basic educational qualifications required for registration as a medical radiological technician.

However, the Medical Radiological Technicians Board has not been actively operating for a number of years. Therefore, the abovementioned provision of The Medical Radiological Technicians Act are not currently in effect.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING RADIOLOGICAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	55,375	1: 6,153
2 (Lethbridge)	25	110,477	1: 4,419
3 (Pincher Creek)	11	35,652	1: 3,241
4 (Hanna)	1	12,119	1: 12,119
5 (Drumheller)	6	38,382	1: 6,397
6 (Calgary)[3]	13	75,939	1: 5,841
7 (Stettler)	11	40,071	1: 3,643
8 (Red Deer)	41	123,642	1: 3,016
9 (Banff)	8	21,670	1: 2,709
10 (Camrose)	15	78,417	1: 5,228
11 (Edmonton)[4]	12	104,984	1: 8,749
12 (Fort McMurray)	14	84,221	1: 6,016
13 (Whitecourt)	8	53,701	1: 6,713
14 (Hinton)	5	24,635	1: 4,927
15 (Grande Prairie)	23	128,639	1: 5,593
Census Metropolitan Area of Edmonton	286	657,057	1: 2,297
Census Metropolitan Area of Calgary	197	592,743	1: 3,009
PROVINCIAL TOTAL	685	2,237,724	1: 3,267

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RADIOLOGICAL TECHNICIANS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered or Practising Personnel	646[1]	603[1]	685[2]
% Change in Number of Registered or Practising Personnel[3]	-5.8%	-6.6%	13.6%
Population (Alberta)[4]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 3,139	1: 3,471	1: 3,267
- Canada[5]	1: 2,956	-	-

[1] Source: Alberta Association of Medical Radiation Technologists. Number of active members registered with the A.A.M.R.T. as of December 31, 1979, and 1980. Excludes honorary, out-of-province, inactive, and retired members.

[2] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[3] Since personnel figures for 1979, 1980, and 1981 are from different sources, they are not comparable. The figures for 1979 and 1980 refer to the number of registered personnel, whereas the 1981 figure refers to the number of practising personnel.

[4] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[5] Source: *Canada Health Manpower Inventory, 1980*, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1981.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A person who wishes to become a radiological technician can obtain training in one of three areas, namely, radiography, radiotherapy, and nuclear medicine. Seven training hospitals in Calgary, Edmonton, and Red Deer, in conjunction with the Northern Alberta Institute of Technology, offer a two-year medical x-ray technology diploma program in radiography. In 1980-81, there were 53 graduates from the program.

Both the Cross Cancer Institute in Edmonton and the Calgary Cancer Clinic offer training programs in therapeutic radiology which are 27 months in length.

Provincial training programs in nuclear medicine are offered by the University of Alberta Hospital and Foothills Hospital in conjunction with the Southern Alberta Institute of Technology. The program is two years in length.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RADIOLOGICAL TECHNICIANS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
A. PROGRAM IN RADIOGRAPHY			
Northern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:			
1st Year	54	55	45
2nd Year	50	53	53
Graduates:	48	48	53

TABLE 3 (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
B. PROGRAMS IN RADIOTHERAPY			
Cross Cancer Institute (length: 27 months)			
Actual Enrollments:			
1st Year	4	4	4
2nd Year	4	5	3
Graduates:	1	2	2
Calgary Cancer Clinic (length: 27 months)			
Actual Enrollments:			
1st Year	2	2	0
2nd Year	2	2	2
Graduates:	2	2	2
PROVINCIAL TOTAL			
Programs in Radiotherapy (2)			
Actual Enrollments:			
1st Year	6	6	4
2nd Year	6	7	5
Graduates:	3	4	4
C. PROGRAM IN NUCLEAR MEDICINE			
Southern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:			
1st Year	8	11	11
2nd Year	9	7	9
Graduates:	9	8	4

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs:

There are no continuing education programs for radiological technicians offered by educational institutions in Alberta.

However, the A.A.M.R.T. offers continuing education courses twice a year which are either weekend seminars or week-long sessions. The Association also provides one-day continuing education courses in conjunction with its Annual General Meeting which is held in June.

In addition, the Canadian Association of Medical Radiation Technologists offers a series of week-long continuing education courses in conjunction with its Annual General Meeting.

RECREATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan, organize and direct program of recreational activities as part of treatment to rehabilitate mentally and physically disabled persons. Assess patient's aptitudes, capabilities, interests and motivations to determine recreational program. Plan program with individuals or groups. Organize, conduct and promote social events. Direct and coordinate games, sports, arts and crafts, drama and sightseeing tours. Train and direct volunteers. Adapt games according to patient's mental and physical abilities. Discuss patient's progress and submit reports. Feed and dress patients and perform other personal care duties, if required.

(Source: No. 3139, Canadian Classification and Dictionary of Occupations, 1981 - Revision)

Since there is no professional association for recreational therapists, manpower information for this occupational group is based on the employer survey conducted by the Alberta Health and Social Services Disciplines Committee.

As of September 30, 1981, there were 121 practising recreational therapists in Alberta.[1] Sixty-nine percent of these personnel were practising in the Census Metropolitan Areas of Edmonton and Calgary, which together made up slightly over half of the province's population. The recreational therapist-to-population ratio in 1981 was 1:18,494.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

None.

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating recreational therapists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING RECREATIONAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	55,375	1:18,458
2 (Lethbridge)	6	110,477	1:18,413
3 (Pincher Creek)	1	35,652	1:35,652
4 (Hanna)	0	12,119	-
5 (Drumheller)	5	38,382	1: 7,676
6 (Calgary)[3]	1	75,939	1:75,939
7 (Stettler)	2	40,071	1:20,036
8 (Red Deer)	13	123,642	1: 9,511
9 (Banff)	0	21,670	-
10 (Camrose)	3	78,417	1:26,139
11 (Edmonton)[4]	0	104,984	-
12 (Fort McMurray)	0	84,221	-
13 (Whitecourt)	0	53,701	-
14 (Hinton)	1	24,635	1:24,635
15 (Grande Prairie)	3	128,639	1:42,880
Census Metropolitan Area of Edmonton	52	657,057	1:12,636
Census Metropolitan Area of Calgary	31	592,743	1:19,121
PROVINCIAL TOTAL	121	2,237,724	1:18,494

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1981.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RECREATIONAL THERAPISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	125[1]	126[2]	121[3]
% Change in Number of Practising Personnel	-	0.8%	-4.0%
Population (Alberta)	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios: - Alberta	1:16,707	1:17,107	1: 18,494

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Sources: 1981 Census Final Population Count, Statistics Canada, Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Mount Royal College offers a two-year associate diploma program in therapeutic recreation. In 1980-81, seventeen students graduated from the program.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RECREATIONAL THERAPISTS IN ALBERTA

	1979-80[1]	1980-81[1]
Mount Royal College (length: 2 Years)		
Actual Enrollments:[2]		
1st Year	45	27
2nd Year	36	18
Graduates:	29	17

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The figures include both full-time and part-time students. There were 72 full-time students and 9 part-time students in 1979-80, and 43 full-time students and 2 part-time students in 1980-81.

b) Continuing Education Programs:

There are no continuing education programs for recreational therapists in Alberta.

REGISTERED NURSES

I. OVERVIEW

Definition: The practice of professional nursing as a registered nurse means the performance for compensation of any act, the goal of which is to assist the individual and family, and/or 'significant others', regardless of the practice setting, to achieve their potential for health. Such practice involves a process which is a systematic, goal-directed, individualized approach to care.

In the practice of professional nursing, within the limits of institutional policy and the law, the nurse has an independent role consisting of assessment, planning, implementation and evaluation of care; a dependent role consisting of the implementation of treatment prescribed and delegated by a licensed physician; and a collaborative role with members of the health team, the family and other community representatives.

A registered nurse may also perform additional acts under special conditions requiring special education and training which are recognized jointly by the medical and nursing professions and the public as proper to be performed by a professional nurse under such conditions.

The practice of the profession of nursing consists of those functions which, in collaboration with the client and other health workers, have as their object to assist the individual and his family to meet their immediate needs for care and to achieve their potential for self-direction for health, both mental and physical. Such functions include:

(i) observation, assessment and analysis to contribute to diagnosis;
(ii) planning, implementation and evaluation of nursing care;
(iii) case finding;
(iv) health teaching;
(v) health counselling;
(vi) the implementation of treatment prescribed by a licensed physician; and
(vii) the systematization and development of nursing knowledge.

(Source: Alberta Association of Registered Nurses)

As of September 30, 1981, there were 16,889 nurses registered with the Alberta Association of Registered Nurses (A.A.R.N.).[1] Of all registered nurses whose regional locations were known, about 59 percent were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the population of the province. Between 1979 and 1981 the number of nurses registered with the A.A.R.N. increased by 15 percent from 14,694 to 16,889, while the provincial population increased by about 7.1 percent during that same period. The registered nurse-to-population ratio in 1981 was 1:132.

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[1] Source: Alberta Association of Registered Nurses.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Registered Nurses
10256 - 112th Street
Edmonton, Alberta
T5K 1M6

Executive Director: Ms. Yvonne Chapman

b) Licensing, Registration, or Certification Authority:

Alberta Association of Registered Nurses
10256 - 112th Street
Edmonton, Alberta
T5K 1M6

c) Legislation:

The Registered Nurses Act was designed as a protection for the public against unethical and incompetent practitioners.

The Act delegates the responsibility for prescribing, maintaining, and controlling standards of nursing education to the Universities Co-ordinating Council.

The Act gives the A.A.R.N. the authority to give legal recognition to practitioners who meet minimum qualifications. This includes nurses registering for the first time in the province, as well as those renewing their certificates of registration on an annual basis. Under the Act, only those possessing an active registration and practising in Alberta are entitled to use the designation "registered nurse."

III. PERSONNEL DATA

TABLE 1 NUMBER OF REGISTERED NURSES AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, 1981

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	348	55,375	1: 159
2 (Lethbridge)	836	110,477	1: 132
3 (Pincher Creek)	222	35,652	1: 161
4 (Hanna)	66	12,119	1: 184
5 (Drumheller)	170	38,382	1: 226
6 (Calgary)[3]	366	75,939	1: 207
7 (Stettler)	232	40,071	1: 173
8 (Red Deer)	947	123,642	1: 131
9 (Banff)	146	21,670	1: 148
10 (Camrose)	487	78,417	1: 161
11 (Edmonton)[4]	972	104,984	1: 108
12 (Fort McMurray)	438	84,221	1: 192
13 (Whitecourt)	223	53,701	1: 241
14 (Hinton)	91	24,635	1: 271
15 (Grande Prairie)	567	128,639	1: 227
Census Metropolitan Area of Edmonton	5,325	657,057	1: 123
Census Metropolitan Area of Calgary	4,607	592,743	1: 129
(Regional Location Unknown or Out-of-Province)	(846)		
PROVINCIAL TOTAL	16,889	2,237,724	1: 132

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. as of September 30, 1981. Excludes inactive, honorary, and retired members.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 3 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSES IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered Personnel[1]	14,694	15,665	16,889
% Change in Number of Registered Personnel	7.2%	6.6%	7.8%
Number of New Registrants[2]	1,647	1,791	1,922
Attrition of Personnel (Number)[3]	656	820	551
Attrition Rate[4]	4.8%	5.6%	3.5%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1: 142	1: 138	1: 132
- Western Canada[6]	1: 139	1: 128	1: 135

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. as of September 30, 1979, 1980, and 1981. Excludes inactive, honorary, associate and retired members. Although the registration figures exclude inactive, honorary, associate and retired members, it was not possible to make this distinction in the data on membership gains and losses. As a result the net increase of membership does not equal the number of new registrants less the attrition of personnel.

[2] Source: Alberta Association of Registered Nurses.

[3] Source: Alberta Association of Registered Nurses. Number of personnel registered in the previous year but did not renew their registration during that year.

[4] Attrition rate: attrition of personnel (number) divided by number registered (previous year).

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81 Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

III. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1980-81, there were eleven basic education programs (nine diploma nursing programs and two baccalaureate nursing programs) for registered nurses in Alberta. In addition, there were two supplementary programs in general nursing for registered psychiatric nurses, leading to registered nurse status. These programs produced a total of 549 graduates (487 diploma nurses and 62 baccalaureate nurses) in 1980-81. Table 3A lists the basic education programs and the two supplementary programs.

The two baccalaureate programs were offered at the University of Alberta and the University of Calgary. Five of the nine diploma programs were offered at community colleges. The other diploma programs were hospital based programs. Formerly there were six hospital based schools of nursing but two of these, namely, the Holy Cross Hospital School of Nursing and the Galt School of Nursing, closed after producing their last group of graduates in 1979.

In addition, there were twelve post-basic education programs for registered nurses in Alberta. Nine of these programs lead to certificates and the other three programs lead to degrees (two post-basic baccalureate degree nursing programs for diploma nurses and one masters degree program). In 1980-81, these programs produced a total of 214 graduates. Table 3B lists the various post-basic education programs for registered nurses.

TABLE 3A BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
A. **DIPLOMA NURSING PROGRAMS**			
Grant MacEwan Community College (length: 2 years)			
Actual Enrollments:[2]			
1st Year	69	70	76
2nd Year	52	53	48
Graduates:	47	39	42
Medicine Hat College (length: 2 years)			
Actual Enrollments:[2]			
1st Year	24	23	30
2nd Year	24	23	14
Graduates:	20	15	10
Mount Royal College (length: 2 years)			
Actual Enrollments:[2]			
1st Year	83	69	84
2nd Year	76	55	38
Graduates:	61	54	37
Red Deer College (length: 2 years)			
Actual Enrollments:[2]			
1st Year	65	69	71
2nd Year	50	41	60
Graduates:	47	37	35
Lethbridge Community College (length: 2 years)			
Actual Enrollments:[2]			
1st Year	61	60	57
2nd Year	32	55	36
Graduates:	29	43	33

TABLE 3A (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
A. DIPLOMA NURSING PROGRAMS (cont'd)			
Holy Cross Hospital (length: 3 years)			
Actual Enrollments:[2]			
1st Year	-	program no longer offered	
2nd Year	-		
3rd Year	20		
Graduates:	20		
Royal Alexandra Hospital (length: 3 years)			
Actual Enrollments:[2]			
1st Year	96	108	93
2nd Year	84	76	90
3rd Year	85	73	77
Graduates:	79	73	77
Misericordia Hospital (length: 3 years)			
Actual Enrollments:[2]			
1st Year	60	61	62
2nd Year	54	47	55
3rd Year	51	42	42
Graduates:	51	41	41
Foothills Hospital (length: 3 years)			
Actual Enrollments:[2]			
1st Year	111	112	113
2rd Year	103	101	93
3rd Year	83	88	82
Graduates:	83	91	82

TABLE 3A (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
A. DIPLOMA NURSING PROGRAMS (cont'd)			
Galt School of Nursing (length: 3 years)			
Actual Enrollments:[2]			
1st Year	-		
2nd Year	-	program	
3rd Year	23	no longer	
Graduates:	23	offered	
University of Alberta Hospital (length: 2 1/3 years)			
Actual Enrollments:[2]			
1st Year	137	130	118
2nd Year	83	115	95
3rd Year	89	82	113
Graduates:	89	82	114
PROVINCIAL TOTAL			
Diploma Nursing Programs (11)			
Graduates:	549	475	471
B. SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES)			
Grant MacEwan Community College (length: 13 months)			
Actual Enrollments:[2]			
1st Year	9	20	9
Graduates:	7	13	7

TABLE 3A (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
B. SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES) (cont'd)			
Red Deer College (length: 12 months)			
Actual Enrollments:[2]			
1st Year	10	6	11
Graduates:	4	6	9
PROVINCIAL TOTAL			
Supplementary Nursing Diploma Programs (2)			
Graduates:	11	19	16
PROVINCIAL TOTAL			
All Diploma Programs (13)			
Graduates:	560	494	487
C. BACCALAUREATE NURSING PROGRAMS			
University of Alberta (length: 4 years)			
Actual Enrollments:			
1st Year	52	54	53
2nd Year	46	41	48
3rd Year	41	31	35
4th Year	32	41	34
Graduates:	32	40	34

TABLE 3A (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
C. **BACCALAUREATE NURSING PROGRAMS** (Cont'd)			
University of Calgary (length: 4 years)			
Actual Enrollments:			
1st Year	60	60	63
2nd Year	49	51	64
3rd Year	42	36	53
4th Year	32	38	29
Graduates:	30	38	28
PROVINCIAL TOTAL			
Baccalaureate Nursing Programs (2)			
Graduates:	62	78	62
PROVINCIAL TOTAL			
Basic Education Programs (15)			
Graduates:	622	572	549

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The above figures include both full-time and part-time students.

TABLE 3B POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
A. CERTIFICATE EDUCATION PROGRAMS			
Neurosurgical Nursing			
Foothills Hospital (length: 22 weeks)			
Actual Enrollments:	16	8	6
Graduates:	16	8	5
Cardio-vascular Intensive Care Nursing			
University of Alberta Hospital (length: 24 weeks)			
Actual Enrollments:	12	6	6
Graduates:	12	6	6
Operating Room Nursing			
University of Alberta Hospital (length: 24 weeks)			
Actual Enrollments:[2]	16	8	6
Graduates:	16	7	6
Occupational Health Nursing			
Grant MacEwan Community College (length: 1 year)			
Actual Enrollments:[2]	84	64	25
Graduates:	32	38	36
Advanced Practical Obstetric Nursing			
University of Alberta (length: 26 weeks)			
Actual Enrollments:	12	13	11
Graduates:	10	13	10

TABLE 3B (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
A. **CERTIFICATE EDUCATION PROGRAMS** (cont'd)			
Nurse Practitioner			
University of Alberta (length: 5 months)			
Actual Enrollments:	16	20	23
Graduates:	11	12	17
Extended Care Nursing			
Grant MacEwan Community College (length: 1 year)			
Actual Enrollments:[2]	15	60	262
Graduates:	1	6	10
Neonatal Intensive Care			
Foothills Hospital (length: 5 months)			
Actual Enrollments:	9	15	8
Graduates:	9	14	8
Mental Health Nursing			
Mount Royal College (length: 1 year)			
Actual Enrollments:	-	-	14
Graduates:	-	-	11
PROVINCIAL TOTAL			
Post-Basic Certificate Programs (9)			
Graduates:	107	104	109

TABLE 3B (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
B. DEGREE EDUCATION PROGRAMS			
Baccalaureate Nursing Program for Diploma Nurses			
University of Alberta (length: 2 years)			
Actual Enrollments:[2]			
1st Year	70	72	129
2nd Year	72	79	72
Graduates:	54	69	59
University of Calgary (length: 2 years)			
Actual Enrollments:[2]			
1st Year	30	30	40
2nd Year	36	38	37
Graduates:	23	21	41
PROVINCIAL TOTAL			
Baccalaureate Nursing Programs for Diploma Nurses (2)			
Graduates:	77	90	100

TABLE 3B (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
C. **GRADUATE DEGREE EDUCATION PROGRAM**			
Masters of Nursing			
University of Alberta (length: 2 years)			
Actual Enrollments:			
1st Year	5	3	7
2nd Year	4	8	2
Graduates:	1	2	5

PROVINCIAL TOTAL			
Post-Basic Education Programs (12)			
Graduates:	185	196	214

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The 1977-78 figures include only full-time students. The above figures include both full-time and part-time students.

b) Continuing Education Programs:

Continuing education courses and programs for registered nurses are available through a number of sources in Alberta.

The Bylaws of the A.A.R.N. state that in order to be eligible for active registration, nurses must have been employed in the practice of nursing for 150 days in the past 5 membership years or, provide evidence confirming their present competency to practise. In accordance with this regulation, the Association encourages the development of refresher programs for inactive nurses who intend to re-register. All refresher programs offered in Albeta must be approved by the A.A.R.N. In 1980-81, eight institutions (Foothills Hospital, Grande Prairie Regional College, Grant MacEwan Community College, Lakeland College, Lethbridge Community College, Mount Royal College, Red Deer College, and University of Alberta Hospital) offered refresher courses in nursing. The length of these courses varied from eight to ten weeks. There were 329 students enrolled in refresher courses during the 1980-81 academic year, and there were 321 graduates.

The annual convention of the A.A.R.N. is usually held in May of each year. The Association often sponsors workshops, lectures, and seminars in conjunction with its annual convention.

The Association provides support to special interest groups whose objective is to promote professional development relating to their areas of expertise.

The University of Alberta and the University of Calgary offer continuing education programs for nurses in various areas of the province. These programs are developed in response to the demonstrated needs of registered nurses. A number of colleges also provide continuing education programs of interest to nurses. Orientation programs, in-service programs, and other types of continuing education programs are offered by individual employing agencies. These may or may not be in conjunction with the continuing education programs of the universities and colleges. Programs may vary in length and cover a wide range of topics.

APPENDIX 1 REGISTERED NURSES BY SPECIALTY AND REGISTERED NURSE-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1981[1]

Specialty	Number of Registered Nurses	Registered Nurse-To-Population Ratios
Administrative	597	1: 3,748
Chronic Care	375	1: 5,967
Community (Public) Health	722	1: 3,099
Emergency Room	511	1: 4,379
Geriatric	755	1: 2,964
Home Care	379	1: 5,904
Intensive Care Units (C.C.U., I.C.U., Burn)	688	1: 3,253
Intravenous Therapy	31	1:72,185
Medical, Surgical	3,505	1: 638
Nursing Education	427	1: 5,241
Obstetrics	920	1: 2,432
Occupational Health	480	1: 4,662
Operating Room	516	1: 4,337
Orthopedic	224	1: 9,990
Paediatrics	616	1: 3,633
Physicians' Offices, Clinics	324	1: 6,907
Private Duty	129	1:17,347
Psychiatric	502	1: 4,458
Recovery Room	119	1:18,804
Rehabilitation	360	1: 6,216
Specialty Total	12,180	1: 183
Others	1,209	1: 1,851
GRAND TOTAL	13,389	1: 167

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel." Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

Note: The total number of personnel in Appendix 1 is less than the total number of personnel in Table 1. This is because Appendix 1 refers to the number of practising registered nurses whereas Table 1 refers to the number of nurses who were registered with the Alberta Association of Registered Nurses.

REGISTERED NURSING ASSISTANTS

I. OVERVIEW

Definition: Provide nursing care for patients in hospitals, nursing homes, clinics and similar establishments. Take and record blood pressure, temperature, pulse and respiration rates. Apply dressings and administer injections, medications and treatments under supervision. Report and record observations and symptoms indicative of change in condition of patients. Assist with admission and discharge of patients. Bathe patients, make beds and assist with rehabilitation procedures. Feed and assist patients in feeding themselves. Answer call-bells and patients' or visitors' inquiries and perform other bedside services. Perform duties in operating room, outpatients and other specialized areas, if required.

(Source: No. 3134, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Association of Registered Nursing Assistants and the Alberta Association of Registered Nursing Orderlies is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of November 1977, certified nursing aides and registered nursing orderlies were re-named "registered nursing assistants" in accordance with The Nursing Assistants Registration Act, 1976.

As of December 31, 1981, there were 7,386 registered nursing assistants registered with the Nursing Assistant Registration Board.[1] However, as of September 30, 1981, there were 3,987 registered nursing assistants actually practising in Alberta.[2] About 55 percent of all practising registered nursing assistants were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The provincial practising registered nursing assistant-to-population ratio in 1981 was 1:561.

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[1] Source: Nursing Assistants Registration Board.

[2] Source: "September 30, 1981 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Registered Nursing Assistants[1]
17410 - 107 Avenue
Edmonton, Alberta
T5S 1E9

President: Ms. Ethelyn Waege

Alberta Association of Registered Nursing Orderlies
10012 - 124th Street
Edmonton, Alberta
T5N 1P6

Executive Secretary: Mr. J.F. Nimeck

b) Licensing, Registration, or Certification Authority:

Nursing Assistants Registration Board
c/o Health and Social Services
Professions and Occupations
8th Floor, South Tower
Seventh Street Plaza
10030 - 107th Street
Edmonton, Alberta
T5J 3E4

Chairman: Mr. J. Briggs

c) Legislation:

Under the authority of The Nursing Assistants Registration Act, all individuals, who want to use the title of "registered nursing assistant," must initially be registered with the Nursing Assistants Registration Board (a provincial government licensing body). In addition, mandatory annual re-registration with the Board is required of all individuals who want to continue using the title of "registered nursing assistants." Membership with the Alberta Association of Registered Nursing Assistants or the Alberta Association of Registered Nursing Orderlies is voluntary.

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[1] Formerly the Alberta Certified Nursing Aide Association.

The Nursing Assistants Registration Board sets the basic educational qualifications required for registration with the Board for nursing assistants trained outside of Alberta. The Minister of Advanced Education and Manpower sets the basic educational qualifications required for registration with the Board for nursing assistants trained in Alberta.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING REGISTERED NURSING ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	87	55,375	1: 636
2 (Lethbridge)	187	110,477	1: 591
3 (Pincher Creek)	98	35,652	1: 364
4 (Hanna)	32	12,119	1: 379
5 (Drumheller)	48	38,382	1: 800
6 (Calgary)[3]	96	75,939	1: 791
7 (Stettler)	141	40,071	1: 284
8 (Red Deer)	229	123,642	1: 540
9 (Banff)	45	21,670	1: 482
10 (Camrose)	205	78,417	1: 383
11 (Edmonton)[4]	130	104,984	1: 808
12 (Fort McMurray)	110	84,221	1: 766
13 (Whitecourt)	134	53,701	1: 401
14 (Hinton)	22	24,635	1: 1,120
15 (Grande Prairie)	236	128,639	1: 545
Census Metropolitan Area of Edmonton	1,439	657,057	1: 457
Census Metropolitan Area of Calgary	748	592,743	1: 792
PROVINCIAL TOTAL	3,987	2,237,724	1: 561

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSING ASSISTANTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Registered or Practising Personnel	5,817[1]	4,043[2]	3,987[3]
% Change in Number of Registered or Practising Personnel[4]	-2.3%	-30.5%	-1.4%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios:			
- Alberta	1:359	1:533	1:561
- Western Canada[6]	1:377	1:343	1:407

[1] Source: Alberta Nursing Assistants Registration Board. Number of personnel registered with the Board and residing in Alberta as of December 31, 1979.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Since personnel figures for 1979, 1980, and 1981 were from different sources, they are not comparable. The figures for 1980 and 1981 refer to practising personnel as opposed to the 1979 figure which refers to registered personnel.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Source: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The figures from British Columbia, Saskatchewan and Manitoba refer to personnel registered in the respective associations, whereas the 1980 and 1981 data from Alberta refer to the number of practising personnel.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to academic year 1978-79, the Alberta Vocational Centres in Edmonton and Calgary offered separate nursing aide and nursing orderly programs, which were 10 months in length. The curriculum content and administrative structure of the nursing aide and nursing orderly programs have been revised. Beginning in 1978-79, these programs were formally amalgamated under the new title of "Nursing Assistant Certificate Program". In 1981, there were 216 graduates from the two training programs at Alberta Vocational Centre, Edmonton and Alberta Vocational Centre, Calgary.

TABLE 3

BASIC EDUCATION PROGRAMS FOR NURSING ASSISTANTS IN ALBERTA[1]

	Enrolments[2]	Graduates[2]
Alberta Vocational Centre, Calgary (length: 38 weeks)		
September 1978 - June 1979	26	10
September 1979 - June 1979	47	29
November 1978 - August 1979	46	33
February 1979 - October 1979	61	49
September 1979 - June 1980	46	37
November 1979 - August 1980	54	49
March 1980 - November 1980	46	26
September 1980 - June 1981	60	37
November 1980 - August 1981	56	42
March 1981 - November 1981	46	27
Alberta Vocational Centre, Edmonton (length: 1 year)		
May 1978 - March 1979	24	9
September 1978 - April 1979	62	48
October 1978 - July 1979	26	16
November 1978 - August 1979	52	38
January 1979 - October 1979	64	51
March 1979 - December 1979	11	6
March 1979 - January 1980	42	33
September 1979 - May 1980	44	40
November 1979 - August 1980	60	45
February 1980 - November 1980	64	52
September 1980 - May 1981	35	23
November 1980 - August 1981	64	48
February 1981 - November 1981	54	39

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[1] Since variations in starting and graduation dates create distortion when data are displayed on the basis of academic years, the enrollment and graduation figures for individual programs are given.

[2] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Services Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs:

Both the Alberta Association of Registered Nursing Assistants and the Alberta Association of Registered Nursing Orderlies sponsor programs of continuing education for their members.

REHABILITATION PRACTITIONERS

I. OVERVIEW

Definition: Rehabilitation practitioners work in the provision of rehabilitation programs to the developmentally handicapped in a community or institutional setting. These workers are normally responsible for the delivery of established care and developmental programs based on client's needs in the areas of residential, family support, vocational, social education, recreation/leisure or developmental day care.

(Source: Government of Alberta)

Since registration with the Alberta Association of Habilitative Practitioners is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981 there were 757 rehabilitation practitioners practising in Alberta.[1] Fifty-nine percent of these personnel were located in the Census Metropolitan Areas of Edmonton and Calgary, which together accounted for slightly over half of the province's population. In addition, another 27 percent of these personnel were found in Census Division 8 where Michener Center, the province's largest institution for the developmentally handicapped, is located. The rehabilitation practitioner-to-population ratio for the province was 1:2,956 in 1981.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Habilitative Practitioners
P.O. Box 887
Red Deer, Alberta
T4N 5H3

President: Mr. Al Geislinger

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating rehabilitation practitioners.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING REHABILITATION PRACTITIONERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	-	55,375	-
2 (Lethbridge)	60	110,477	1:1,841
3 (Pincher Creek)	-	35,652	-
4 (Hanna)	-	12,119	-
5 (Drumheller)	-	38,382	-
6 (Calgary)[3]	1	75,939	1:75,939
7 (Stettler)	-	40,071	-
8 (Red Deer)	203	123,642	1:609
9 (Banff)	-	21,670	-
10 (Camrose)	1	78,417	1:78,417
11 (Edmonton)[4]	15	104,984	1:6,999
12 (Fort McMurray)	3	84,221	1:28,074
13 (Whitecourt)	6	53,701	1:8,950
14 (Hinton)	-	24,635	-
15 (Grande Prairie)	25	128,639	1:5,146
Census Metropolitan Area of Edmonton	247	657,057	1:2,660
Census Metropolitan Area of Calgary	196	592,743	1:3,024
PROVINCIAL TOTAL	757	2,237,724	:2,956

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REHABILITATION PRACTITIONERS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	438[1]	497[2]	757[3]
% Change in Number of Practising Personnel[4]	-	13.5%	52.3%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios: - Alberta	1: 4,768	1: 4,337	1: 2,956

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] The discrepancy between the 1980 and 1981 personnel figures is due mainly to the more comprehensive coverage of employers of rehabilitation practitioners in the 1981 survey.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs

In 1980-81 there were both one-year certificate and two-year diploma programs in rehabilitation services located at Grant MacEwan Community College, Lethbridge Community College, Mount Royal College, and Red Deer College. In 1980-81 there were 63 graduates from the diploma programs and 84 graduates from the certificate programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
CERTIFICATE AND DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College (length: certificate - 1 year; diploma - 2 years)			
Actual Enrollments:[2]			
1st Year (Certificate)	42	43	117
2nd Year (Diploma)	20	17	30
Graduates:			
Certificate	31	30	30
Diploma	20	24	17
Lethbridge Community College (length: certificate - 1 year; diploma - 2 years)			
Actual Enrollments:[2]			
1st Year (Certificate)	24	26	22
2nd Year (Diploma)	9	10	15
Graduates:			
Certificate	17	17	15
Diploma	5	7	12

TABLE 3 (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
Mount Royal Community College (length: certificate - 1 year; diploma - 2 years)			
Actual Enrollments:[2]			
1st Year (Certificate)	41	29	33
2nd Year (Diploma)	-	15	12
Graduates:			
Certificate	2	1	1
Diploma	-	13	6
Red Deer College (length: certificate - 1 year; diploma - 2 years)			
Actual Enrollments:[2]			
1st Year	40	45	50
2nd Year	41	45	32
Graduates:			
Certificate	31	34	38
Diploma	35	30	28
PROVINCIAL TOTAL			
Certificate Training Programs (4)			
Graduates:	81	82	84
Diploma Training Programs (4)			
Graduates:	60	74	63

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[1] Source: Alberta Health and Social Services Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The figures include both full-time and part-time students. In 1980-81 there were 142 full-time students and 80 part-time students in the certificate program, and 74 full-time and 15 part-time students in the diploma program.

b) **Continuing Education Programs:**

There are no continuing education programs for rehabilitation practitioners in Alberta.

RESPIRATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Administer respiratory therapy to patients in hospital or at home. Discuss patient's treatment with medical and nursing staff. Set up ventilators, incubators, manual resuscitators and other life support equipment. Attach life support equipment to patient. Operate controls of equipment to adjust airway pressure, humidity, blood gas levels, respiratory rate and other factors. Monitor patient's progress and equipment function. Perform basic pulmonary function tests to assist physician in diagnosis of respiratory illnesses. Take blood sample from patient and analyze for blood gas values, if required. Explain treatment procedures and demonstrate equipment operation to patients and hospitals personnel. Perform artificial respiration and external cardiac massage, if required. Service and repair equipment and inspect all medical piping, manifolds and patient alarm system.

(Source: No. 3159, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Society of Respiratory Technologists is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981 there were 260 respiratory technologists practising in Alberta.[1] About 85 percent of these personnel were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The respiratory technologist-to-population ratio in 1981 was 1:8,607.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Respiratory Technologists
7027 - 183 Street
Edmonton, Alberta
T5T 2V5

President: Miss Marlene Irwin

b) Licensing, Registration or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating respiratory technologists.

III PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING RESPIRATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	55,375	1: 13,844
2 (Lethbridge)	9	110,477	1: 12,275
3 (Pincher Creek)	0	35,652	-
4 (Hanna)	0	12,119	-
5 (Drumheller)	0	38,382	-
6 (Calgary)[3]	0	75,939	-
7 (Stettler)	0	40,071	-
8 (Red Deer)	13	123,642	1: 9,511
9 (Banff)	1	21,670	1: 21,670
10 (Camrose)	3	78,417	1: 26,139
11 (Edmonton)[4]	1	104,984	1:104,984
12 (Fort McMurray)	2	84,221	1: 42,111
13 (Whitecourt)	0	53,701	-
14 (Hinton)	0	24,635	-
15 (Grande Prairie)	3	128,639	1: 42,880
Census Metropolitan Area of Edmonton	128	657,057	1: 5,133
Census Metropolitan Area of Calgary	96	592,743	1: 6,174
PROVINCIAL TOTAL	260	2,237,724	1: 8,607

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RESPIRATORY TECHNOLOGISTS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	223[1]	217[2]	260[3]
% Change in Number of Practising Personnel[4]	7.7%	-2.7%	19.8%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios			
- Alberta	1: 9,092	1: 9,644	1: 8,607
- Western Canada[6]	1:16,055	-	1:14,928

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] The discrepancy between the 1980 and 1981 personnel figures is due mainly to the more comprehensive coverage of employers of respiratory technologists in the 1981 Survey.

[5] Sources: 1981 Census Final Population Count, Statistics Canada; Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

[6] Sources: Rollcall 81, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1982; Health Manpower Provincial Report, Manitoba, 1981, Research Section, Department of Health, Winnipeg, Manitoba, 1981; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The figures from British Columbia, Saskatchewan, and Manitoba refer to personnel registered in the respective associations, whereas the data from Alberta refer to the number of practising personnel.

IV EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer two-year training programs for respiratory technologists. In 1980-81, 39 students graduated from these two training programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RESPIRATORY TECHNOLOGISTS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
Northern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:			
1st Year	32	36	36
2nd Year	30	27	25
Graduates:	29	21	26
Southern Alberta Institute of Technology (length: 2 years)			
Actual Enrollments:			
1st Year	25	26	25
2nd Year	26	23	23
Graduates:	24	23	13
PROVINCIAL TOTAL Training Programs (2)			
Actual Enrollments:			
1st Year	57	62	61
2nd Year	56	50	48
Graduates:	53	44	39

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

b) Continuing Education Programs:

The Alberta Society of Respiratory Technologists sponsors some continuing education programs for its members. They also host an annual symposium.

SOCIAL WORKERS

I. OVERVIEW

Definition: A social worker is a human service professional, generally working within the field of social welfare, who facilitates individual and collective action against existing and potential personal and social problems. The primary focus of a social worker is on the patterns of social interactions between people and the institutions of society. A social worker uses individualized or social reform services, or both, to help individuals, families, small groups and communities to meet basic food, clothing, shelter, and other selected social well-being needs.

A social worker functions to help with personal and collective problem-solving, to aid coping and developmental capacities of people, to connect people with social welfare resources and other resources normally provided by the family and market place, to promote the effective and socially just development and/or operation of human service resources.

Social workers plan, design, assess, implement, and evaluate selected social services to individuals, families, small groups, and communities. They use a variety of social work approaches, practise in many areas of social welfare, work with multiple population groups and are employed in a wide range of settings, including private practice, all levels of government services, voluntary community services, hospitals, schools, and industries.

(Source: Alberta Association of Social Workers)

Since registration with the Alberta Association of Social Workers is not mandatory, the employer survey conducted by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

As of September 30, 1981, there were 1,757 practising social workers in Alberta.[1] About 69 percent of the practising social workers were located in the Census Metropolitan Areas of Edmonton and Calgary, while these two areas together accounted for slightly over half of the provincial population. The social worker-to-population ratio in 1981 was 1:1,274.

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Social Workers
P.O. Box 661
Edmonton, Alberta
T5J 2K8

President: Mr. John Mould

b) Licensing, Registration, or Certification Authority:

Alberta Association of Social Workers
P.O. Box 661
Edmonton, Alberta
T5J 2K8

c) Legislation:

No legislation exists in Alberta requiring mandatory registration of all social workers practising in the province. However, under the authority of The Social Workers Act (1969), social workers who want to be professionally accountable for their practice to the individuals, families, groups, or communities they serve may apply to become registered members of the Alberta Association of Social Workers (A.A.S.W.).

Individuals who have a masters degree in social work, or individuals who have sufficient practical experience in social work and who have satisfactorily completed any examination assigned by the Universities Coordinating Council may be registered as a "registered social worker" and have exclusive use of that title. Annual payment of fees is required to maintain registration.

The Universities Coordinating Council evaluates the academic qualifications required for registration with the A.A.S.W. as a "registered social worker." A.A.S.W. sets the basic experience requirements and determines whether the person is of good character and reputation.

Upon complaint (supported by statutory declaration) against a registered social worker, the Alberta Association of Social Workers is empowered by the Social Workers Act to investigate the complaint and, if warranted, to discipline the social worker.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PRACTISING SOCIAL WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1981

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	33	55,375	1: 1,678
2 (Lethbridge)	99	110,477	1: 1,116
3 (Pincher Creek)	5	35,652	1: 7,130
4 (Hanna)	4	12,119	1: 3,030
5 (Drumheller)	11	38,382	1: 3,489
6 (Calgary)[3]	18	75,939	1: 4,219
7 (Stettler)	14	40,071	1: 2,862
8 (Red Deer)	87	123,642	1: 1,421
9 (Banff)	19	21,670	1, 1,141
10 (Camrose)	23	78,417	1: 3,409
11 (Edmonton)[4]	29	[illegible]4,984	1: 3,620
12 (Fort McMurray)	74	84,221	1: 1,138
13 (Whitecourt)	23	53,701	1: 2,335
14 (Hinton)	4	24,635	1: 6,159
15 (Grande Prairie)	93	128,639	1: 1,383
Census Metropolitan Area of Edmonton	624	657,057	1: 1,053
Census Metropolitan Area of Calgary	597	592,743	1: 993
PROVINCIAL TOTAL	1,757	2,237,724	1: 1,274

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[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: 1981 Census Final Population Count, Statistics Canada.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR SOCIAL WORKERS IN ALBERTA, 1979, 1980, AND 1981

	1979	1980	1981
Number of Practising Personnel	1,236[1]	1,566[2]	1,757[3]
% Change in Number of Practising Personnel[4]	-	26.7%	12.2%
Population (Alberta)[5]	2,088,428	2,155,518	2,237,724
% Change in Population	3.3%	3.2%	3.7%
Personnel-to-Population Ratios: - Alberta	1: 1,640	1: 1,336	1: 1,274

[1] Source: "September 30, 1979 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1980.

[2] Source: "September 30, 1980 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, February 1981.

[3] Source: September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[4] Much of the increase shown between 1979 and 1980 is due to the inclusion of non-university degree social workers and social work technicians into the general category of social workers in the 1980 manpower survey. Previously these personnel had not been included.

[5] Sources: 1981 Census Final Population Count, Statistics Canada, Provincial population estimates for 1979 and 1980 were developed by the Planning Secretariat, Department of Social Services and Community Health.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Calgary offers both a four-year Bachelor of Social Work (B.S.W.) program and a one- or two-year Masters of Social Work (M.S.W.) program. In 1980-81, there were 115 graduates from the B.S.W. program. The M.S.W. program had 13 graduates in 1980-81.

Satellite programs of the Faculty of Social Welfare, the University of Calgary are located in Edmonton on the University of Alberta campus and in Lethbridge on the University of Lethbridge campus. The Edmonton Division offers a full range of courses at the first professional degree (B.S.W.) level whereas a partial range of B.S.W. courses is available in Lethbridge. Social work courses are also provided in Peace River, Grande Prairie, St. Paul, Medicine Hat, Drumheller, and Red Deer through the medium of "tele-conferencing".

In addition to university level training, two-year programs leading to a diploma in social services are available at Red Deer College, Grant MacEwan Community College, and Mount Royal College. In 1980-81 there were 93 graduates from the programs at the three colleges.

TABLE 3 BASIC EDUCATION PROGRAMS FOR SOCIAL WORKERS IN ALBERTA

	1978-79[1]	1979-80[1]	1980-81[1]
A. BACCALAUREATE PROGRAM			
University of Calgary Bachelor of Social Work (B.S.W.) (length: 4 years)			
Actual Enrollments:[2]			
1st Year	63	25	34
2nd Year	74	64	87
3rd Year	163	155	154
4th Year	129	134	139
Graduates:	119	112	115
B. MASTERS PROGRAM			
University of Calgary Masters of Social Work (M.S.W.) (length: 1 - 2 years)[3]			
Actual Enrollments:[4]			
1st Year	27	26	58
2nd Year	24	-	-
Graduates:	24	21	13
C. SOCIAL SERVICE DIPLOMA PROGRAMS			
Red Deer College (length 2 years)			
Actual Enrollments:[5]			
1st Year	22	24	24
2nd Year	18	16	20
Graduates:	18	15	18
Grant MacEwan Community College (length 2 years)			
Actual Enrollments:[5]			
1st Year	47	63	57
2nd Year	52	42	57
Graduates:	41	32	46

TABLE 3 (cont'd)

	1978-79[1]	1979-80[1]	1980-81[1]
Mount Royal College (length 2 years)			
Actual Enrollments:[5]			
1st Year	100	182	N/A
2nd Year	54	80	72
Graduates:	48	43	29
PROVINCIAL TOTAL			
Diploma Training Programs (3)[5]			
Actual Enrollments:			
1st Year	169	269	117
2nd Year	124	138	149
Graduates:	107	90	93

[1] Source: Alberta Health and Social Service Training Program Inventory, 1980-81, Health and Social Service Programs Branch, Alberta Advanced Education and Manpower, Edmonton, Alberta, March 1982.

[2] The enrollment figures include both full-time and part-time students. In 1980-81, there were 290 full-time students and 124 part-time students enrolled in the B.S.W. program. The Faculty of Social Welfare admits students from other faculties into the third year of the B.S.W. program. This accounts for the discrepancy between the enrollment figures for the second year and the third year of the program.

[3] The M.S.W. Program is one year in length following a B.S.W. Degree. Students with an undergraduate degree other than a B.S.W. Degree may be admitted to a two-year program.

[4] The enrollment figures include both full-time and part-time students. There were 28 full-time students and 30 part-time students enrolled in the M.S.W. program in 1980-81.

[5] Enrollment figures include both full-time and part-time students. In 1979-80 there were 351 full-time students and 56 part-time students in the three colleges. In 1980-81 there were 224 full-time students and 6 part-time students.

b) Continuing Education Programs:

The Faculty of Social Welfare and the Faculty of Continuing Education at the University of Calgary provide on-going professional education in social work in various parts of the province to ensure that new approaches, research, and knowledge are made available to practising social workers.

Continuing professional education programs are also offered by the Alberta Association of Social Workers. The association also holds an annual two-day conference.